
IN HAC SPERO
IN HAC VINCE



Charles Barclay

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GENERAL ZOOLOGY

or

SYSTEMATIC NATURAL HISTORY

commenced by the late

GEORGE SHAW, M.D. F.R.S. &c.

WITH PLATES

from the first Authorities and most select specimens

Engraved principally by

MRS GRIFFITH.



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GENERAL ZOOLOGY.

VOLUME XIII.—PART I.

BY

JAMES FRANCIS STEPHENS, F.L.S. &c.

BIRDS.

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Directions for placing the Plates to Vol. XIII. Part I.

The vignette represents the *Common Razor-bill,* described at page 27.

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ERRATA.—PART I.

Page 74, line 15, *for* Rasores, *read* Raptatores.
— 106, — 9, *for* Booby *read* Gannet.
— 117, — 8, *for* dentalus *read* dentatus.
— 119, — 14, *for* Tachypletis *read* Tachypetes.
— 208, — 9, *for* pacifica *read* pacificus.
— 239 to 248 — 1, *for* Pintado *read* Sea-Pintado.

BIRDS.

ORDER

NATATORES.

FAM. COLYMBIDÆ.

PODICEPS. GREBE.

Generic Character.

Rostrum capite longius aut longior, robustum, paulò compressum, aut ferè cylyndricum, subulatum, rectum, integrum, acutum; mandibulâ superiore rectâ aut apice adunco.

Nares laterales, concavæ, oblongæ, membranâ semiclausæ.

Tibiæ seminudæ.

Pedes tetradactyli; *digiti* antici depressi lateribus lobo simplici instructi, basique connexi; *pollex* tarso internè articulatus.

Cauda nulla.

Beak the length of the head or longer, robust, a little compressed, or nearly cylindrical, subulated, straight, entire, pointed; the upper mandible straight, or hooked at the tip.

Nostrils lateral, concave, oblong, half closed by a membrane.

Shanks half-naked.

Legs four-toed; the *anterior toes* depressed, with their sides furnished with a simple lobe connected at the base; the *hinder toe* internally articulated to the tarsus.

Tail wanting.

PODICEPS. Ray, Lath., Cuv., Vieill., Temm.
COLYMBUS. Linn., Gmel., Briss., Ray, &c.

GREBES are discriminated from the Divers by their lobated feet, and from the Finfeet by the form of their beak, and the absence of the tail. They were included by Linnæus among the former birds, but have been detached by his followers, and formed into a new order, (including also the Coots, and Phalaropes) by the appellation of PINNATIPEDES, a division which appears to be unnatural: I have therefore placed them among the NATATORES, and consider them as belonging to the family Colymbidæ, from which nothing but their divided toes detaches them: they form an interesting link between the Divers and Auks, and their manners are highly indicative of their proper situation in nature, their delight being in swimming and diving, in which they are assisted by their wings: they fly very badly, and walk most awkwardly and with difficulty; their attitude being nearly erect, and their legs being placed at the very extremity of the abdomen, beyond the equilibrium of the body. They frequent the fresh waters in preference to those of the sea: their plumage is very soft, thick, and downy, with a fine silken lustre. They feed on small fishes, coleopterous insects, reptiles, and vegetables.

CRESTED GREBE.

(Podiceps cristatus.)

Po. *supra fusco-niger, subtus argenteo-albus, alis fasciâ albâ, collo aut fusco aut nigricante striato, torque supremo nigro, vel rufo nigro marginato.*

Grebe above brown-black, beneath silvery-white, with a white fascia on the wings, the neck either brown or striped with dusky, having a collar on its upper parts, sometimes black, or rufous with a black margin.

Podiceps cristatus. *Lath. Ind. Orn.* 2. 780.

Colymbus cristatus. *Linn. Syst. Nat.* 1. 222. *Gmel. Syst. Nat.* 1. 589.

Colymbus major; cristatus et cornutus. *Raii Syn.* 124. *A.*

Colymbus cornutus. *Briss. Orn.* 6. 45. *pl.* 5. *f.* 1.

Le Grêbe cornu. *Buff. Hist. Nat. Ois.* 8. 235. *Buff. Pl. Enl.* 400.

Le Grêbe huppé. *Temm. man. d'Orn.* 462. *Id.* 2 *Edit.* 717. *Cuv. Reg. Anim.* 1. 507.

Greater crested and horned Ducker. *Alb. Birds,* 1. *pl.* 81.

Crested Grebe. *Penn. Brit. Zool.* 2. *No.* 223. *Penn. Arct. Zool.* 2. 498. *A. Lath. Gen. Syn.* 5. 281. *Lew. Brit. Birds,* 5. *pl.* 106. *Walc. Syn.* 1. *pl.* 102. *Don. Brit. Birds,* 3. *pl.* 68. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 145. *Graves Orn. v.* iii. *Lath. Gen. Hist.* x. 20.

Young.—Colymbus urinator. *Linn. Syst. Nat.* 1. 223. *Gmel. Syst. Nat.* 1. 593.

Colymbus. *Briss. Orn.* 6. 34. *pl.* 3. *f.* 1.

Colymbus major Aldrovandi. *Ray. Syn.* 125.

Colymbus cristatus. *Briss. Orn.* 6. 38. *pl.* 4.

Colymbus cinereus major. *Ray. Syn.* 124. *A.*

Le Grêbe. *Buff. Hist. Nat. Ois.* 8. 227. *Buff. Pl. Enl.* 941.

Le Grêbe huppé. *Buff. Hist. Nat. Ois.* 8. 233. *Buff. Pl. Enl.* 944.

Greater Loon. *Edwards, pl.* 360.

Tippet Grebe. *Lath. Gen. Syn.* 5. 283. *Penn. Brit. Zool.* 2. 222. *pl.* 78. *Bew. Brit. Birds,* 2. 157.

In the adult state this bird is upwards of eighteen inches in length; its beak is dull red, brown above and white at its tip: its irides are crimson: its face is white: the top of the head, and crest thereon, as well as the ruff on each side beneath its cheeks, are deep glossy black, shaded off into reddish on each side of its head: all the upper parts of the plumage are brown and dusky: the secondary quills are pure white: the under parts of the body are glossy silvery white, tinged with reddish at the sides of the breast and near the insertion of the wings: between the base of the beak and the eye is a naked red space: the legs are dusky externally and yellowish-white internally. The female is rather smaller, and the feathers of the crest and ruff are shorter; the colours of the plumage are less brilliant. The young at the age of two years, after moulting, have the occipital crest very short, edged with white feathers, the face is white without the red shades, and the ruff is very slight: a dusky irregular band runs from the beak beneath the eyes to the occiput: before moulting the crest and ruff are not indicated; the forehead and the face are white: these parts, as well as the top of the neck, are varied with dusky brown stripes, disposed on all sides in zigzag forms: the irides are bright yellow: the beak is livid red. The young of one year before moulting have the head and the top of the neck of a deep brown.

These birds inhabit the borders of the sea, lakes, ponds, or rivers, and are rarely seen on land: on the

least appearance of danger they plunge under water, depending very little on their wings for safety. They are common in the fens and lakes of various parts of England, where they breed: the female forms her nest, which is of a large size, of various aquatic plants, leaving it floating amongst the reeds, to the mercy of the waves; she lays four white eggs, slightly marbled with deep brown.

Their principal food consists of fishes, in pursuit of which they dive excellently. They change their situations according to the season, frequenting the mouths of large rivers, when the severity of the frost freezes the ponds. In their migrations they skim along the surface of the sea. They inhabit most parts of Europe from the Mediterranean to the Northern Seas: they are also found in America.

CAYENNE GREBE.

(Podiceps Cayanus.)

Po. *fusco-nigricans, subtus albus, collo subtus rufo.*
Brown-black Grebe, beneath white, with the neck beneath red.
Podiceps Cayanus. *Lath. Ind. Orn.* 2. 781.
Colymbus Cayennensis. *Gmel. Syst. Nat.* 1. 593.
Le Grand Grêbe. *Buff. Hist. Nat. Ois.* 8. 242.
Grêbe de Cayenne. *Buff. Pl. Enl.* 404. *f.* 1.
Cayenne Grebe. *Lath. Gen. Syst.* 5. 284. *Lath. Gen. Hist.* x. 34.

This bird inhabits Cayenne: it is nearly twenty inches in length: its beak is dusky; the under man-

dible is yellow at the base: its head, and the upper parts of the neck and body, are dusky brown: the fore parts of the neck, as far as the breast and the sides, are rufous; the sides being varied with brown: the breast and upper parts of the belly are white; the lower part and vent are brown: the legs are dusky.

BLACK-BREASTED GREBE.

(Podiceps Thomensis.)

Po. *fuscus, subtus albus maculis griseis, remigibus pallide rufis, maculâ pectoris nigrâ.*

Brown Grebe, beneath white with grey spots, the quills pale rufous, the breast with a black spot.

Podiceps Thomensis. *Lath. Ind. Orn.* 2. 784.

Colymbus Thomensis. *Gmel. Syst. Nat.* 1. 592.

Colymbus Insulæ St. Thomæ. *Briss. Orn.* 6. 58.

Le Grêbe Duc-laart. *Buff. Hist. Nat. Ois.* 8. 240.

Black-breasted Grêbe. *Lath. Gen. Syn.* 5. 289. *Lath. Gen. Hist.* x. 34.

According to Buffon this species inhabits the island of St. Thomas, where it is called Duc-laart. It is the size of a small fowl: its beak is one inch in length, black, with its tip pale: its irides are white: the head and upper parts of the body are dull brown: between the beak and the eye is a spot of white: the under parts of the body are white, except a large spot of black on the breast; and the belly, sides, and thighs being spotted with grey: the wing-coverts are pale rufous: the legs are dusky.

WHITE-WINGED GREBE.

(Podiceps Dominicus.)

Po. *capite lævi, corpore subtus confertim fusco maculato.*
Grebe with the head smooth, the body beneath thickly spotted with brown.
Podiceps Dominicus. *Lath. Ind. Orn.* 2. 785.
Colymbus Dominicus. *Linn. Syst. Nat.* 1. 223. *Gmel. Syst. Nat.* 1. 593. *Briss. Orn.* 6. 64. *pl.* 5. *f.* 2.
Le Castagneux de St. Dominique. *Buff. Hist. Nat. Ois.* 8. 248.
White-winged Grebe. *Lath. Gen. Syn.* 5. 291. *Lath. Gen. Hist.* x. 32.

The white-winged Grebe is a small species, being scarcely eight inches in length: its beak is black: the upper parts of the plumage are dusky: the sides of the head, the chin, and the fore part of the neck, are dusky-grey: the quills are greyish-white, more or less marked with spots of greyish-brown on their outer webs and tips: the breast, belly, sides, and thighs are silvery grey marked with small brown spots: the legs are brown. Dr. Latham mentions several varieties; one of them (from Jamaica) was of a uniform dusky lead-colour, with a large patch of white on the middle of the belly; and another differed merely in having that part wholly brown.

They inhabit various parts of the West India Islands, and the northern coasts of South America. At Barbadoes they are called Twopenny Chicks. They feed on fish.

RED-NECKED GREBE.

(Podiceps rubricollis.)

Po. *subcristatus fuscus, gulâ genis regioneque aurium cinerascentibus vel albidis nigro lineatis, collo subtus pectoreque ferrugineo-rufis, abdomine remigibusque secundariis albis.*

Subcrested brown Grebe, with the throat, cheeks, and region of the ears greyish or white lineated with black, the neck beneath and breast rusty-red, the abdomen and secondary quills white.

Podiceps rubricollis. *Lath. Ind. Orn.* 2. 783. *Sabine, Frank. Voy. App.* 692.

Colymbus rubricollis. *Gmel. Syst. Nat.* 1. 592.

Colymbus subcristatus. *Gmel. Syst. Nat.* 1. 590.

Le Grêbe à joues grises, ou la Jougris. *Buff. Hist. Nat. Ois.* 8. 241. *Buff. Pl. Enl.* 931. *Temm. man. d'Orn.* 465. *Id.* 2 *Ed.* 726. *Cuv. Reg. Anim.* 1. 508.

Red-necked Grebe. *Penn. Arct. Zool.* 2. 499. *C. Lath. Gen. Syn.* 5. 288. *Lath. Syn. Sup.* 260. *pl.* 118. *Lew. Brit. Birds,* 5. *pl.* 199. *Walc. Syn.* 1. *pl.* 103. *Don. Brit. Birds,* 1. *pl.* 6. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 152.

Young.—Colymbus parotis. *Gmel. Syst. Nat.* 1. 592. *Musc. Cart. fas.* 1. *pl.* 9.

About seventeen inches in length: the base of the beak is bright yellow, the rest black: the irides are reddish-brown: the forehead, the top of the head and its occipital crest (which is short) are glossy black: the cheeks and throat are mouse-coloured: on the nape is a broad black band: the fore part of the neck, the sides, and top of the breast are bright red: the rest of the under parts are white, except the thighs, which are spotted with dusky brown: the secondary quills are white: the hind part of the neck, the back



HORNED GREBE.

and wings are dark brown: the legs are outwardly black and inwardly greenish-yellow. The young at the age of two years have the throat and the cheeks white: the top of the head of a whitish-yellow, with irregular zigzag brown and dusky bands: the top of the head and the occiput are black, with the feathers of the latter part somewhat elongated: the lower part of the neck and the top of the breast are dull red varied with brown, with some of the feathers on the latter part and of the belly tipped with ash-colour.

This species inhabits various parts of Europe, affecting the borders of rivers, lakes, &c.; it is extremely abundant in the eastern parts of the continent, and becomes rarer as we proceed westward. In England but very few specimens have hitherto been found. It subsists on small fish, insects, and vegetable matter. The female lays three or four greenish-white eggs, sprinkled with brown. Found also in the arctic regions of America.

HORNED GREBE.

(Podiceps cornutus.)

Po. *fusco-nigricans, subtus albus, alis fasciâ albâ, collo subtus rufo-fulvo vel castaneo, torque nigro.*

Dusky-brown Grebe, beneath white, the wings with a white fascia, the neck beneath reddish-brown or chesnut, with a black collar.

Podiceps cornutus. *Lath. Ind. Orn.* 2. 782. *Sabine, Frank. Voy. App.* 693.

Colymbus cornutus. *Gmel. Syst. Nat.* 1. 591.

Colymbus cornutus minor. *Briss. Orn.* 6. 50.
Le petit Grêbe cornu. *Buff. Hist. Nat. Ois.* 8. 237.
Le Grêbe d'Esclavonie. *Buff. Pl. Enl.* 404. *f.* 2. *Temm. man. d'Orn.* 466. *Id.* 2 *Edit.* 722.
Le Grêbe cornu. *Cuv. Reg. Anim.* 1. 508.
Horned Grêbe, or Dobchick. *Edw. Glean. pl.* 145. *Penn. Brit. Zool.* 2. 417. *Lath. Gen. Syn.* 5. 287. *pl.* 91. *Lath. Gen. Hist.* x. 25.
Sclavonian Grebe. *Mont. Orn. Dict.* 1. *and Supp.*
Young.—Podiceps obscurus. *Lath. Ind. Orn.* 2. 782.
Colymbus obscurus. *Gmel. Syst. Nat.* 1. 592.
Colymbus minor. *Briss. Orn.* 6. 56.
Colymbus Caspicus. *Gmel. Syst. Nat.* 1. 593.
Podiceps Caspicus. *Lath. Ind. Orn.* 2. 784.
Le petit Grêbe. *Buff. Hist. Nat. Ois.* 8. 232. *Buff. Pl. Enl.* 942.
Black and White Dobchick. *Edw. Glean. pl.* 96. *f.* 1.
Dusky Grebe. *Penn. Brit. Zool.* 2. 225. *pl.* 78. *Penn. Arct. Zool.* 2. 420. *Lath. Gen. Syn.* 5. 286. *Lew. Brit. Birds,* 5. *pl.* 198. *Walc. Syn.* 1. *pl.* 106. *Don. Brit. Birds,* 2. *pl.* 44. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 150. *Lath. Gen. Hist.* x. 26.
Variety.—Colymbus cristatus minor. *Briss. Orn.* 6. 42. *pl.* 3. *f.* 2.
Eared Grebe, var. A. *Lath. Gen. Syn.* 5. 286.
Le petit Grêbe huppé. *Buff. Ois.* 8. 235.

About thirteen inches in length: the base of the beak and a naked space near the eyes are rose coloured; the rest of the beak is black, with its tip red: the irides have a double ring of colour, the first of which is yellow and the other deep red: the top of the head, and also a very large and ample ruff which surrounds the top of the neck, is deep shining black: above and behind the eyes is a large tuft of red feathers, which forms as it were two horns: the space between the upper mandibles of the beak and

the eye, the neck and the breast, are clear brilliant red: the under parts of the plumage are pure white, except the sides, which are shaded with reddish: the nape and upper parts of the plumage are dusky: the secondary quills are white: the legs are black externally and grey internally. The young, previous to the completion of their first year, are totally destitute of the crest or ruff: between the beak and the eye is white: the head, the nape, and all the upper parts are dusky-ash: the secondary quills are white: the throat is white, and that colour extends in a horizontal line beneath the eyes, and reaches entirely to the back of the head, or occiput: the middle of the fore part of the neck is ashy-white: the sides of the breast and the flanks are dusky-ash; the rest of the under parts are pure white: the beak is of an ashy-blue, but its base, as well as the naked space, are flesh colour; and the upper part of the beak is horn coloured, with a yellowish point: the inner circle of the irides is pure white, the outer bright red: the legs are externally brown, internally ashy-blue.

Found most abundant in the eastern countries of Europe, particularly those that are watered by great rivers, lakes, or the sea: they are also frequently observed in England, particularly about the fens of Lincolnshire and the inlets on the coast of Devonshire; they are also found in North America: they feed on the same materials as the rest of the genus, and build their nests in a similar manner: the female lays three or four white eggs, which are spotted with brown. Specimens of this bird were received from North America from Captain Franklin's Expedition.

EARED GREBE.

(Podiceps auritus.)

Po. *fusco-nigricans, subtus albus, capite nigro, cristâ ferrugineâ, collo subtus maculis castaneis vario.*

Dusky-brown Grebe, beneath white, with the head black, vent rust-colour, neck beneath varied with chesnut spots.

Podiceps auritus. *Lath. Ind. Orn.* 2. 781.

Colymbus auritus. *Linn. Syst. Nat.* 1. 222. *Gmel. Syst. Nat.* 1. 590. *a.* *Briss. Orn.* 6. 50.

Le Grêbe oreillard. *Temm. man. d'Orn.* 469. *Id.* 2 *Edit.* 726.

Eared Dobchick. *Edw. Glean. pl.* 96. *f.* 2.

Eared Grebe. *Lath. Gen. Syn.* 5. 185. *Penn. Brit. Zool.* 2. 224. *pl.* 79. *Penn. Arct. Zool.* 2. 499. *Lew. Brit. Birds,* 5. *pl.* 107. *Walc. Syn.* 1. *pl.* 104. *Don. Brit. Birds,* 2. *pl.* 29. *Mont. Orn. Dict.* 1. *and Supp.* *Bew. Brit. Birds,* 2. 149. *Lath. Gen. Hist.* x. 23.

This is about a foot in length: its beak and the naked space adjoining are reddish: the irides are deep vermilion: its face, the top of its head, and its occipital crest and ruff (which are very short) are deep black: behind and beneath the eyes is a tuft of long slender feathers, the upper ones being of a bright yellow, and the lower ones deep orange-red, gradually shaded off: these feathers form an arch, and cover the orifice of the ears: the throat, all the neck, the sides of the breast, and all the upper parts of the plumage, are black slightly glossed: the flanks and thighs are very deep chesnut-red, shaded with dusky: the rest of the under parts are pure white: the legs are ashy-black externally and



Griffith

LITTLE GREBE.

ashy-green internally. The young greatly resemble those of the Horned Grebe, but are distinguished from the white on the cheek and sides of the head not extending so far as the occiput; by the irides having but one colour, and by the base of the beak being sensibly depressed.

This is found most abundant in the rivers and fresh water lakes, but it nevertheless frequents the sea-coasts: it is very common in the north of Europe, in Germany, France, Switzerland, and Italy; but rare in Holland and England. Its food principally consists of insects, but it devours small fish, &c.: the female lays three or four eggs, of a greenish-white, slightly sprinkled with brown: her nest is constructed in the same manner as that of the rest of the genus.

LITTLE GREBE.

(Podiceps minor.)

Po. *nigricans, gulâ nigrâ, jugulo ferrugineo, abdomine cinereo argenteo vario.*

Dusky Grebe, with the throat black, the jugulum ferruginous, the abdomen ash-coloured, varied with silvery.

Podiceps Hebridicus. *Lath. Ind. Orn.* 2. 785.

Colymbus Hebridicus. *Gmel. Syst. Nat.* 1. 594.

Black-chin Grebe. *Penn. Brit. Zool.* 2. 227. *pl.* 79. *Penn. Arct. Zool.* 2. 227. *Lath. Gen. Syn.* 5. 292. *Lew. Brit. Birds,* 5. *pl.* 201. *Walc. Syn.* 1. *pl.* 107. *Mont. Orn. Dict.* 1. *and Supp. Sowerby, Brit. Misc. pl.* 70. *Bew. Brit. Birds,* 2. 156. *Lath. Gen. Hist.* x. 31.

Le Grêbe castagneux. *Temm. man. d'Orn.* 471. *Id.* 2 *Edit.* ii. 727. *Cuv. Reg. Anim.* 1. 508.
Young.—Podiceps minor. *Lath. Ind. Orn.* 2. 784. *Ray, Syn.* 125. *A.*
Colymbus minor. *Gmel. Syst. Nat.* 1. 591.
Colymbus fluviatilis. *Briss. Orn.* 6. 59.
Le Grêbe de la riviere, ou le Castagneux. *Buff. Hist. Nat. Ois. E.* 244. *pl.* 20. *Buff. Pl. Enl.* 905.
Little Grebe. *Penn. Brit. Zool.* 2. 226. *Lath. Gen. Syn.* 5. 289. *Lew. Brit. Birds,* 5. *pl.* 200. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 154. *Lath. Gen. Hist.* x. 30.
Didapper. *Walc. Syn.* 2. *pl.* 105. *Don. Brit. Birds,* 3. *pl.* 56.

This is the smallest of the European Grebes, scarcely exceeding ten inches in length: its beak is black, with the base of its under mandible and the naked space near the eyes whitish: the irides are reddish-brown: the throat, the top of the head, and the nape are deep black, the sides and fore part of the neck are bright chesnut-red: the breast and the flanks are dusky: the rest of the under parts are ashy-black, on which appear several white shades: the thighs and the rump are tinged with reddish: the upper parts of the plumage are dusky glossed with olivaceous: the quills are ashy-brown: the secondary quills are white at their base: the legs are outwardly of a greenish-brown, inwardly of a flesh-colour. The young of the second year, after their first moult, have the top of the head, the nape, the upper parts and the sides of the neck white, varied or marked with bands and spots of deep reddish-brown: behind the eyes are some oblique white streaks: the under part and fore part of the neck, the breast, and flanks are bright red: the thighs are dusky red: the middle of

the belly is pure white. The young of the first year have the top of the head, the nape, and the upper parts of the plumage of an ashy-brown, slightly tinged with reddish: the throat is pure white: the sides of the neck are of a pale ashy-red: the fore part of the neck, the top of the breast, and the flank are of a reddish-white of various shades: the belly is pure white: the under mandible of the beak, and the margin of the upper are ashy-yellow; the rest of the beak is brown: the irides are brown.

Frequent the lakes, rivers, ponds, and fresh waters of most parts of Europe, Asia, and America: in this country they are very common, and are found even in fish-ponds: they are frequently destroyed by pike and other voracious fish: they seldom take wing, but when alarmed, dive, and remain under water amongst the reeds and other plants, with only the beak above for respiration: they devour aquatic insects, coleoptera particularly, and small fishes. Their nest is very large, composed of a quantity of flags or other aquatic plants, but is generally fastened to the reeds in order to prevent its being carried away by sudden floods or currents. The female lays five or six eggs, of an oblong shape and dirty white colour: they are generally covered with weeds, but notwithstanding this, they frequently become the prey of the water-rat. A pair of these birds were taken in a pond, on Chelsea Common, in June 1805, with the nest and eggs.

PHILIPPINE GREBE.

(Podiceps Philippensis.)

Po. *supra purpureo-fuscus, subtus albo-argenteus, genis lateribusque colli rufescentibus.*

Grebe above of a purple-brown, beneath silvery white, with the cheeks and sides of the neck reddish.

Podiceps minor β. *Lath. Ind. Orn.* 2. 784.

Le Castagneux des Philippines. *Buff. Hist. Nat. Ois.* 8. 246. *Buff. Pl. Enl.* 945.

Little Grebe, var. A. *Lath. Gen. Syn.* 5. 290.

This appears to be distinct from the preceding: it is rather larger, and has the upper parts of the plumage brown tinged with purple; and the cheeks and side of the neck incline to rufous: in other respects it resembles that bird.

It inhabits the Philippine Islands, and also Southern Africa.

PIED-BILL GREBE.

(Podiceps Carolinensis.)

Po. *corpore fusco, rostro fasciâ sesquialterâ, gulâ nigrâ.*

Grebe with the body brown, the beak with a fascia and the throat black.

Podiceps Carolinensis. *Lath. Ind. Orn.* 2. 785. *Sabine, Frank. Voy. App.* 692.

Colymbus Podiceps. *Linn. Syst. Nat.* 1. 223. *Gmel. Syst. Nat.* 1. 594.

Colymbus fluviatilis Carolinensis. *Briss. Orn.* 6. 63.
Le Castagneux à bec cerclé. *Buff. Hist. Nat. Ois.* 8. 247.
Pied-bill Grebe. *Penn. Arct. Zool.* 2. 418. *pl.* 22. *Catesby, Carol.* 1. *pl.* 91. *Lath. Gen. Syn.* 5. 292. *Lath. Gen. Hist.* x. 35.

The Pied-bill Grebe is thus described by Latham from a specimen in his own collection: "Length fourteen inches: beak strong, a little bent, not unlike that of the common poultry; colour olive, with a dusky base, and crossed through the middle of both mandibles with a bar of black: nostrils very wide: irides white: chin and throat of a glossy black, bounded with white: upper part of the neck and back dusky: cheeks and under parts of the neck pale brown: breast and belly silvery, the first mottled with ash-colour: wings brown; end of the secondaries white: toes furnished with a broad membrane. The female wants the black bar on the beak, and has the chin and throat of the same colour with the rest of the neck. Inhabits New York to South Carolina." Also found by Captain Franklin in the Expedition to the northern regions of America.

LOUISIANE GREBE.

(Podiceps Ludovicianus.)

Po. *fuscus, lateribus colli corporisque ferrugineis, corpore subtus albo maculis transversis nigricantibus.*

Brown Grebe with the sides of the neck and of the body rust-colour, the body beneath white, with transverse dusky spots.

Podiceps Ludovicianus. *Lath. Ind. Orn.* 2. 785.

Colymbus Ludovicianus. *Gmel. Syst. Nat.* 1. 592.

Le Grêbe de la Louisiane. *Buff. Hist. Nat. Ois.* 8. 240. *Buff. Pl. Enl.* 943.

Louisiane Grebe. *Lath. Gen. Syn.* 5. 289. *Penn. Arct. Zool.* 2. 419. *Lath. Gen. Hist.* x. 36.

NATIVE of Louisiane: its beak is slightly bent at its point: the upper parts of the head and body are deep brown: the sides of the neck and body, quite to the rump, are ferruginous: the middle of the breast is dusky white: from the base of the neck to the thighs marked with large transverse black spots: legs dusky.

NEW HOLLAND GREBE.

(Podiceps Novæ Hollandiæ.)

Po. *supra nigricante cinereoque undulatâ, subtus pallide cinereâ, tectricibus alarum majoribus albis, colli lateribus strigâ rufâ.*

Grebe waved above with dusky and cinereous, beneath pale cinereous, with the greater wing-coverts white, the sides of the neck with a rufous stripe.

New Holland Grebe. *Lath. Gen. Hist.* x. 33.

A SPECIES introduced by the following description in the new edition of Dr. Latham's History of Birds. "Length, from the beak to the end of the toes, eighteen inches: beak black: head and part of the neck dusky black: the rest of the parts above waved dusky and pale grey: beneath pale grey: the larger wing-coverts and base half of the quills white, taking up a large portion of the wing; the outer ridge is also white: on each side of the neck a long streak of rufous, beginning just under the eye: legs black." Inhabits New Holland, and there called *Mayaga*.

PODOA. FINFOOT.

Generic Character.

Rostrum mediocre, crassiusculum, subdeflexum, acutum: mandibulâ superiore sulco laterali.	*Beak* mediocral, rather stout, slightly deflexed, pointed: the upper mandible with a lateral groove.
Nares concavæ in sulco sitæ, membranâ tectæ.	*Nostrils* concave, placed in the groove, and closed by a membrane.
Pedes breves, validi, tetradactyli, *digitis* elongatis lobatis.	*Legs* short, strong, four-toed, the *toes* elongated and lobed.
Cauda cuneiforma.	*Tail* wedge-shaped.

PODOA. Illig.
HELIORNIS. Vieil.
PLOTUS. Gmel., Lath.

THIS singular genus of birds has the beak moderately curved, pointed, and elongated: the nostrils linear and concave, placed in a groove, and covered by a membrane, the aperture oblong: the body depressed: the tail somewhat wedge-shaped and rather elongated: the legs short, stout, with four toes, three of which are placed forwards and one backwards, and all furnished with a scolloped membrane: the claws

are sharp and bent. There are but two species known, both of which inhabit the torrid regions of the globe, one occurring in the old, and the other in the new world: they affect the banks of rivers and creeks, and feed upon small fish and insects.

The situation of this genus is very difficult to determine: in some respects the individuals of which it is composed resemble the Grebes, and in others the Coots or Rails: again, the long neck of one of the species appears to connect that bird with the Darters: unlike the rest of the Colymbidæ, they do not dive.

AFRICAN FINFOOT.

(Podoa Senegalensis.)

Po. *corpore suprà fusca, subtus albo, colli lateribus dorsoque nigro maculatis, caudâ cuneiformi, rigidâ, angustâ, rostro pedibusque rubris.*

Finfoot with the body brown above and white beneath, the sides of the neck and back spotted with black, the tail wedge-shaped, rigid, and narrow, the beak and legs red.

Heliornis Senegalensis. *Vieill. 2 Edit. du Nouv. Dict. d'Hist. Nat. tom.* 14. *p.* 271.

African Finfoot. *Lath. Gen. Hist.* x. 10.

This species has the head, the upper part of the neck and of the body, the wings and the tail, brown; the colour being dullest on the head and upper part of the neck; the sides of the last, as well as those of the back and the flanks, are spotted with black: a

white stripe reaches from the beak, passing over the eye, and down the sides of the throat and neck; the fore part of which, and the under parts of the body, are white: the tail is wedge-shaped; its feathers rigid, straight, with the base orange.

This species inhabits Senegal, and is said to be as large as the Darter; which genus it resembles in the structure of its head, neck, and tail; the Grebes by its beak, and the Coots by its feet; which have their anterior toes bordered with distinct lobes; the exterior ones being united only at their base, and the outer ones divided: the posterior toe is not lobated. It appears to vary in the colour of its plumage.

SURINAM FINFOOT.

(Podoa Surinamensis.)

Po. *corpore suprà fusco subtus albo, vertice colloque posteriore nigris, gulâ jugulo et fasciâ oculari albis, lateribus colli albo nigroque lineatis.*

Finfoot with the body above brown, beneath white, with the crown and neck behind black, the throat, jugulum, and fascia near the eye white, the sides of the neck striped with black and white.

Plotus Surinamensis. *Gmel. Syst. Nat.* 1. 581. *Lath. Ind. Orn.* 2. 896.

Le Grebe-foulque. *Buff. Hist. Nat. Ois.* 8. *p.* 248. *Buff. Pl. Enl.* 893.

Surinam Darter. *Lath. Gen. Syn.* 6. 626.

American Finfoot. *Lath. Gen. Hist.* x. 11.

This species is the size of a Teal: length thirteen inches: the beak is one inch and an eighth long, and of a pale colour: irides red: the crown of the head is black, and the feathers behind elongated into a small crest: the head itself small; and the neck slender and long in proportion to the body: the cheeks are of a bright bay: from the corner of each eye is a line of white: the sides and hind part of the neck longitudinally marked with lines of black and white: wings, back, and tail dusky brown: the first pretty large, reaching to within one inch of the tail when closed: the tail is tipped with white, and is wedge-shaped: the upper tail-coverts remarkably long, giving the appearance of two tails, one above another: breast and belly white: legs short, and rather stout: *all* the four toes joined together by a membrane *: the legs are of a pale dusky colour; and the toes are barred with black.

Inhabits Surinam; and is chiefly seen on the sides of rivers and creeks, feeding on small fish, as well as insects, in the capture of which it is very dexterous, scarcely ever missing its aim: it is a very active bird, and is continually flitting its wings and tail.

* This character assimilates the present species with the Darters, if it be, as here stated, that *all* the toes are united.

ALCADÆ.

THE Alcadæ are discriminated from the rest of the *Natatores* by the very backward position of their legs, which in some of the genera are placed at the extremity of the abdomen. The beak is of various forms, but it is generally much compressed, and oftentimes transversely grooved on its sides; towards the tip it is bent downwards, and the upper mandible is sometimes furnished with a notch: the nostrils are either linear and parallel to the edge of the beak, or rounded and placed in a deep furrow; in some they are hidden in a bed of silken feathers, and in others they are exposed. The wings are very short, and in some genera the quill-feathers are entirely wanting. The legs are furnished either with three or four toes.

From the above characters it is evident that the genera comprised in this family differ considerably from each other; in fact, there is so marked a difference that they may readily be divided into two sections or *sub-stirpes*.

DIVISION I.

Rostrum *plerumque valdè compressum, sæpe transversim sulcatum;* pedes *tridactyli;* alæ *breves.*

Beak generally much compressed, and often transversely grooved; *feet* three-toed; *wings* short.

THE birds which are included in this division are all natives of the northern regions: they fly well,

with the exception of the last in the series (the great Auk), whose quills are too short to allow of such locomotion: they are all, however, admirable swimmers and divers, and many of them while swimming are immersed up to the neck in the water. They nidificate in the clefts and fissures of rocks, some species laying but one, and others two eggs: they all feed on small fishes, crustacea, vermes or mollusca, or marine vegetables.

UTAMANIA. RAZOR-BILL.

Generic Character.

Rostrum rectum, compressum, ad apicem valdè curvatum; mandibulæ basi plumulis tectæ, apice sulcatæ.

Nares laterales, marginales, lineares, in medio rostri sitæ, membranâ semiclausæ.

Pedes breves, tridactyli, palmati; *ungues* paulò curvati.

Alæ mediocres.

Beak straight, compressed, much curved towards the tip; the base of the mandible clothed with feathers, the tip grooved.

Nostrils lateral, marginal, linear, placed in the middle of the beak, and half closed by a membrane.

Legs short, three-toed, palmated; the *nails* rather curved.

Wings mediocral.

UTAMANIA. Ray, Leach.
ALCA. Linn., Gmel., Lath., Temm., &c.

RAZOR-BILLS frequent the northern regions, and appear to be extended over all the seas within the Arctic Circle; they are, however, rarely observed at a distance from land: their manners greatly resemble those of the Guillemots, and, like those birds, the female lays but a single egg: they fly with great velocity, and swim and dive with much dexterity.

COMMON RAZOR-BILL.

(Utamania Torda.)

Ut. *corpore nigro, subtus à medio jugulo albo, lineâ utrinque albâ à rostro ad oculos.*

Razor-bill with the body black, beneath from the middle of the jugulum white, a white line on each side from the beak to the eyes.

Alca Torda. *Linn. Syst. Nat.* 1. 210. *Gmel. Syst. Nat.* 1. 551. *Brun. Orn. Boreal. no.* 100. *Briss. Orn.* 6. 892. *pl.* 8. *f.* 1. *Lath. Ind. Orn.* 2. 793.

Alca Hoieri. *Raii, Syn.* 119. *A.*

Utamania Torda. *Leach, Cat. Brit. Mus. p.* 42.

Le Pingoin. *Buff. Hist. Nat. Ois.* 9. 390. *Buff. Pl. Enl.* 1003. *Cuv. Reg. Anim.* 512.

Le Pingoin macroptère. *Temm. man. d'Orn.* 616. *Id.* 2 *Edit.* ii. 937.

Razor-bill, Auk, or Murre. *Penn. Brit. Zool.* 2. 230. *pl.* 82. *Edw. Glean. pl.* 358. *f.* 2. *Lath. Gen. Syn.* 5. 319. *Lath. Syn. Supp.* 264. *Lew. Brit. Birds,* 6. *pl.* 224. *Don. Brit. Birds,* 3. *pl.* 64. *Walc. Syn.* 1. *pl.* 84. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. *pl.* 164. *Lath. Gen. Hist.* x. 63.

Length about fifteen inches: the beak is black, with three or four grooves, and a pure white transverse band in the middle: the irides bright brown: the top of the head, the nape, the sides of the neck, and all the upper parts are deep black: the cheeks, the throat, and superior part of the front of the neck are black, shaded with reddish: a white longitudinal band runs from the middle of the beak to the eyes: the quills are dusky-brown; the secondaries are slightly edged

with white: the breast and all the under parts of the plumage are pure white: the legs are ashy-black. The female has not the white band which runs from the beak to the eye: the space behind the eyes, as well as all the fore part and sides of the neck, are pure white; in other respects she resembles the male. The young (*according to Temminck*) are very similar to the female in colour, but the beak is not grooved with white, and is not so broad: the young males after their first moult are distinguished from the young females by the band between the beak and eyes, which is very straight, and but slightly marked. The young of the first year, in both sexes, have the top of the head, the nape, and all the rest of the upper parts of a black-grey; and all the under parts are pure white; the white equally predominating on the sides of the head and towards the occiput, where it is produced in the form of an angle: beneath and behind the eyes is a large dusky brown spot, which reaches to the orifice of the ears: the beak is small, but little elevated, and without grooves: the irides are dusky.

Montagu, however, asserts that the young differ in no respect from the adults, excepting in wanting the furrows on the beak: he also asserts that the following species, which has been confused by naturalists with the present, is really distinct; but as his observations on these points have been already quoted, when speaking of the Common Guillemot, in volume 12, page 244 of this work, and in the account of the following bird, I shall refer the reader to them, in order to avoid repetition.

The Common Razor-bill frequents rocky places,

and appears on our coasts early in the spring, and associates with the Guillemots. About the beginning of May the female deposits her single egg on the bare rock; it is of a dirty white, blotched and spotted with brown and dusky, and of a large size in proportion to that of the bird: it is singularly poised on the rock, and it has been asserted that, when one of them is removed by the hand, it is impossible, or at least extremely difficult, to replace it in its former steady situation: this has induced some people to suppose that a kind of glutinous substance on the egg-shell, when originally deposited, caused it to adhere; but Montagu says, that he has seen them by hundreds in a row, and frequently taken them up and laid them down in the same spot, and that they are not cemented to the surface of the rock: they are frequently eaten by the natives of Scotland, who procure them by being let down from the top of the cliffs by a rope, or by climbing up and down by the help of a crook fastened to a pole; in which dangerous employment many of them perish: they are also used in refining sugar.

The principal food of these birds is small fish, particularly sprats, with which they also feed their young: they are in great abundance in this country, and likewise occur throughout the greater portion of Europe and the northern parts of Asia and America.

WHITE-THROATED RAZOR-BILL.

(Utamania pica.)

Ut. *corpore supra nigro, subtus à gulâ ad caudâ albo.*
Razor-bill with the body above black, beneath from the throat to the tail white.
Alca pica. *Linn. Syst. Nat.* 1. 210. *Gmel. Syst. Nat.* 1. 551.
Alca Torda, femina. *Lath. Ind. Orn.* 2. 794.
Alca minor. *Briss. Orn.* 923. *pl.* 8. *f.* 2.
Alca unisulcata. *Brun. Orn. Boreal. no.* 102.
Mergus Bellonii, Utamania. *Raii, Syn.* 119.
Le Petit Pingoin. *Buff. Hist. Nat. Ois.* 9. 396. *Buff. Pl. Enl.* 1004.
Utamania Pica. *Leach, Cat. Brit. Mus. p.* 42.
Black-billed Auk. *Penn. Brit. Zool.* 2. 231. *Penn. Arct. Zool.* 2. 426. *Lath. Gen. Syn.* 5. 320. *Walc. Syn.* 2. *pl.* 85. *Mont. Orn. Dict.* 2. *and Sup. Bew. Brit. Birds,* 2. 167. *Lath. Gen. Hist.* x. 65.

"Length fifteen inches: the beak is black, of the shape and size of that of the preceding species; smooth and void of furrows in some: others possess three distinct furrows: that nearest the base white: irides hazel: the top of the head, taking in the eyes, part of the neck, back, wings, and tail, are black: the lesser quill-feathers tipped with white: the side of the head, fore part of the neck, and whole under side of the body white: legs brown-black."

The above is Montagu's definition of this species, which I have transcribed in order to prevent confusion, as it is his firm opinion that it is truly distinct

from the preceding bird; and in support thereof he adds the following paragraph:—"Dr. Latham, in his Synopsis, mentions his suspicion that this is no other than the Razor-bill immatured; and, in his Index Ornithologicus, gives it as the young of that bird. We cannot, however, but differ in opinion from that excellent ornithologist, by late observations on the young of the Razor-bill before and after they could fly, which differ only from the parent bird in having no furrows in the beak, being destitute of the white line from the bill to the eye, and no white on the secondary quill-feathers; but the whole head and upper part of the neck are black, which is the essential difference between that bird and the Black-billed Auk. This is only found on our coasts in winter. The Razor-bill breeds with us, and retires in the autumn, at which time none are to be found with the white cheeks and throat amongst the myriads that haunt our cliffs. It is hardly possible, then, to conceive that the young, who are in their first feathers so like the old ones, should become more unlike them in winter, which is contrary to nature; for observation has taught us that all birds become more like their parents at every moulting; so that to make these birds one and the same species, we must conclude both old and young change their plumage in winter: but this we have no reason at present to believe. And indeed it is probable that whatever change may take place, that singular line in the matured Razor-bill, running from the beak to the eye, never varies; and which constitutes one of

the greatest characteristic distinctions. The black part of the plumage of this bird is invariably deeper coloured than in the Razor-bill, particularly about the head."

Inhabits the same places as the preceding; and the account of its manners, &c. have been confused with those of that bird.

MERGULUS. SEA-DOVE.

Generic Character.

Rostrum mediocre, basi plumis tomentosis instructum, crassiusculum, supra convexum, versus apicem emarginatum, curvatum.

Nares rotundæ plumis semitectæ.

Pedes breves, tridactyli, palmati.

Alæ breves.

Beak medial, its base furnished with downy feathers, somewhat thickened, above convex, emarginate towards the tip, curved.

Nostrils rounded, half covered with feathers.

Legs short, three-toed, webbed.

Wings short.

MERGULUS. Ray, Vieil., Leach.
ALCA. Linn., Gmel., Lath.
URIA. Briss., Brunn., Temm., Sabine.

THERE is but one species known belonging to this genus, which is readily distinguished from the other Alcadæ by its short, thick, and convex beak, which is feathered from the corners of the mouth half-way forwards towards the point.

COMMON SEA-DOVE.

(Mergulus melanoleucos.)

Me. *corpore atro subtus remigumque posticarum apicibus albis.*
Sea-dove with a dark-coloured body, with the under parts and tips of the posterior quills white.
Alca Alle. *Linn. Syst. Nat.* 1. 211. *Gmel. Syst. Nat.* 1. 554. *Lath. Ind. Orn.* 2. 795. *Linn. Trans.* xii. *p.* 537.
Uria minor. *Briss. Orn.* 6. 73.
Uria Alle. *Sabine, Parry's Voyage, App. p.* ccx.
Small Black and White Diver. *Edw. Glean. pl.* 91.
Greenland Dove. *Albin's Birds,* 1. *pl.* 85.
Guillemot nain. *Temm. man. d'Orn.* 611. *Id.* 2 *Edit.* ii. 929.
Mergulus melanoleucos rostro acuto brevi. *Ray,* 125. *A.*
Young.—Alca Alle. *Brun. Orn. Boreal. no.* 106.
Le petit Guillemot. *Buff. Pl. Enl.* 917.
Little Auk. *Penn. Brit. Zool.* 2. 233. *pl.* 82. *Penn. Arct. Zool.* 2. *pl.* 429. *Lath. Gen. Syn.* 5. 327. *Lew. Brit. Birds,* 6. 223. *Walc. Syn.* 1. *pl.* 88. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 172. *Wils. Amer. Orn.* ix. 94. *pl.* lxxiv. *f.* 5. *Lath. Gen. Hist.* x. 70.
Variety.—Alca candida. *Brun. Orn. Boreal. no.* 107.

Length about nine inches: the beak black: irides dusky-brown: the top of the head, the cheeks, the throat, the upper part of the neck, the nape, and the rest of the upper parts of the plumage deep black: the quills are dusky-brown, and the secondaries tipped with white: the lower part of the front of the neck, the breast, and the rest of the under parts of the body are pure white: the tarsi and toes are reddish-brown, and the webs dusky. The young have the top of the head, the space round the eyes, the nape,



COMMON SEADOVE.

sides of the breast, and all the upper parts of a deep black; except the termination of the secondary quills, and three or four longitudinal stripes on the greater wing-coverts nearest the body, which are white: the throat, the fore part and sides of the neck, and all the under parts are pure white: the sides of the head are also white, with dusky streaks: the tarsi and toes are yellowish-brown: the webs dirty green.

This species varies according to its age; in being more or less spotted on the throat and upper part of the neck; or being without the longitudinal bands on the greater wing-coverts. It has also occurred entirely of a white colour.

This chiefly resides in the polar regions, and is more abundant in those of America than in Europe: it also occurs in lower latitudes, being occasionally, but rarely, found on the coasts of England, France, and Holland. Some authors assert that it lays *two* eggs of a clear blue colour, on the ledges of the rocks; others, that it lays but *one*, which is occasionally sprinkled with dusky spots. Its principal food consists of small crabs, lobsters, and other crustacea and mollusca.

FRATERCULA. PUFFIN.

Generic Character.

Rostrum capite brevior, tam altum quam longum, basi tam latum quam facies, utrinque valdè compressum, transversim sulcatum : mandibulâ superiore apice aduncâ, inferiore subtus angulosâ.

Nares lineares, basi et lateribus rostri sitæ, membranâ nudâ ferè toto tectæ.

Pedes breves, tridactyli ; *ungues* curvati.

Alæ mediocres.

Beak shorter than the head, higher than long, the base broader than the face, on each side very much compressed, transversely grooved ; the upper mandible hooked at the tip, the lower angulated beneath.

Nostrils linear, placed at the base and sides of the beak, almost entirely clothed with a naked membrane.

Legs short, three-toed ; *claws* curved.

Wings medial.

FRATERCULA. Briss., Leach.
ALCA. Linn., Brun., Lath., &c.
MORMON. Illig., Temm.
ANAS. Ray.
LARVA. Vieil.

THE beak of these birds is of a very singular construction, being exceedingly compressed ; it is shorter than the head ; the mandibles are much arched, trans-



1, ARCTIC PUFFIN.

2, NORTHERN PUFFIN.

versely grooved, and emarginate at the tip; at the base it is generally furnished with a curiously puckered skin, forming a kind of star: the nostrils are placed in a long narrow groove, near the edge of the beak, and are nearly covered with a naked membrane: their wings are short, but not so much so as to prevent their flying, which motion they perform, however, with less facility than the birds of the preceding genera of this family; but they dart along the surface of the sea with great address. They generally frequent the coasts or shores of the sea, being rarely found inland, or on the fresh-water lakes, and feed on small fishes, insects, and marine vegetables: they lay two eggs, and nidificate in burrows.

ARCTIC PUFFIN.

(Fratercula arctica.)

Fr. *corpore nigricante, genis, pectore abdomineque albis, rostro rubro basi nigro.*

Puffin with a dusky body, the cheeks, breast, and abdomen white, the beak red, with its base black.

Alca arctica. *Linn. Syst. Nat.* 1. 211. *Gmel. Syst. Nat.* 1. 549. *Brun. Orn. Boreal. no.* 103. *Lath. Ind. Orn.* 2. 792.

Alca Labradora. *Gmel. Syst. Nat.* 1. 550. *Lath. Ind. Orn.* 2. 793.

Fratercula. *Briss. Orn.* 6. 81. *pl.* 6. *f.* 2.

Anas arctica. *Raii, Syn.* 120. *A.*

Le Macareux. *Buff. Hist. Nat. Ois.* 9. 358. *pl.* 26. *Buff. Pl. Enl.* 275. *Cuv. Reg. Anim.* 1. 511.

Macareux moine. (Mormon fratercula.) *Temm. man. d'Orn.* 614. *Id.* 2 *Edit.* ii. 934.

Labrador Auk. *Lath. Gen. Syn.* 5. 318. *Penn. Arct. Zool.* 2. 428. *Lath. Gen. Hist.* x. 62.

Puffin. *Albin's Birds,* 2. *pl.* 78, 79. *Edw. Glean. pl.* 358. *f.* 1. *Penn. Brit. Zool.* 2. 232. *Penn. Arct. Zool.* 2. 427. *Lath. Gen. Syn.* 5. 314. *Lew. Brit. Birds,* 6. *pl.* 225. *Don. Brit. Birds,* 1. *pl.* 8. *Walc. Syn.* 1. *pl.* 87. *Mont. Orn. Dict.* 2. *and Supp. Bew. Brit. Birds,* 2. 168. *Lath. Gen. Hist.* x. 58.

Alca deleata. *Brun. Orn. Boreal. no.* 104.

Length about one foot: the base of the beak bluish-ash, its middle yellow, and its point bright red; the upper mandible is marked with three furrows, the under with two: its irides are whitish: the margins of the eyes red: the top of the head, all the upper parts of the body, and a collar surrounding the neck, are deep shining black: the quills are dusky-brown: the cheeks, a broad band above the eyes, and the throat, are very bright grey: the breast, the belly, and the rest of the under parts are pure white: the legs are orange-red. The young have the beak much less than the old, smooth at its sides, and without furrows; it is of a yellowish-brown colour: the space between the eye and the beak is of a dusky-ash colour: the cheeks and the throat are of a deeper ash than in the old: the collar on the neck is shaded with dusky-ash in front; and the legs are dull red.

These singular birds inhabit the polar regions of Europe, Asia, and America, retiring southward to breed: they are found in the greatest profusion on several of the coasts of England, especially those of Priestholm Island, near Anglesea: also about the Needles, in the Isle of Wight, and at Beechy Head:

they appear on those coasts in the beginning of April; and they immediately commence the operation of forming burrows in the earth for their young ones. This task is usually allotted to the males, who are so intent on the business, as to suffer themselves, at that time, to be taken with the hand. They sometimes dislodge the Rabbits from their holes, and save themselves the trouble of forming one of their own.

The females lay one whitish-coloured egg upon the bare ground in their burrows, and the males assist in the office of incubation. The young ones are hatched in the beginning of July: the parents are very attentive to them, and will defend them to the last, by severely biting whatever enemy attempts to molest them, and will suffer themselves to be taken rather than desert them: and yet, notwithstanding this uncommon attachment, when the day of migration arrives, the young which are not able to fly are left behind, and mostly perish by want, or are destroyed by birds of prey.

The food of these birds is sprats, sea-weeds, small crabs, shrimps, &c., which makes them excessively rank: yet the young are pickled and preserved with spices, and by some people are much admired.

Their bite is very severe. Bewick mentions that one sent to him in a box covered with netting caught hold of the finger of a man, and brought away the fleshy part, as if it had been cut out with a knife. They may be easily tamed, and soon become familiar: in this state they feed upon fish, and other animal substances.

NORTHERN PUFFIN.

(Fratercula glacialis.)

Fr. *corpore nigro, genis schistaceo-albidis, pectore abdomineque albis, rostro pallido basi nigro.*

Puffin with a black body, the cheeks slaty-white, breast and abdomen white, the beak pale, with its base black.

Fratercula glacialis. *Leach in Brit. Mus. Collection.*

This species greatly resembles the preceding, but the colours are more intense, and the form of the beak is different: it was discovered during Captain Ross's Expedition to the northern regions; and specimens are now preserved in the collection at the British Museum.

TUFTED PUFFIN.

(Fratercula cirrhata.)

Fr. *corpore nigricante, fronte, capitis lateribus, gulâque albis, superciliis albis, postice flavis elongatis cirrhatis.*

Puffin with a dusky body, the forehead, sides of the head, and throat white, the eyebrows white, with an elongate crest behind yellow.

Alca cirrhata. *Pall. Spic.* 5. *pl.* 1. *Gmel. Syst. Nat.* 1. 553. *Lath. Ind. Orn.* 2. 791.

Le Macareux de Kamtschatka. *Buff. Hist. Nat. Ois.* 9. 368. *Buff. Pl. Enl.* 761.

Tufted Auk. *Penn. Arct. Zool.* 2. 432. *Lath. Gen. Syn.* 5. 313. *pl.* 95. *f.* 1. (head.) *Lath. Gen. Hist.* x. 57. *pl.* 170. *f.* 1.

LARGER than the Puffin: length nineteen inches: beak an inch and three quarters in length, the same in depth at the base, and crossed with three furrows: the colours nearly as in the Puffin: the forehead, sides of the head, and chin are white: irides yellowish-brown: over each eye arises a tuft of feathers four inches or more in length, which falls elegantly on each side of the neck, reaching almost to the back; these are white as far as they are attached to the head, but afterwards of a fine buff-yellow: the rest of the plumage is black, palest on the under parts, and inclining to ash-colour: the shafts of the quills are white: tail very short, consisting of sixteen feathers: legs of a brownish-orange: claws black. "The female scarcely differs, except in being less; the beak crossed only with two furrows, instead of three; and the tuft smaller."

Latham gives the above description of this curious bird, and adds, that it is found at Kamtschatka and the neighbouring islands: the natives of which places formerly used their beaks as amulets or charms; and at present make use of their skins for clothing. They are stated to lay but one egg only: their food consists of crabs, shrimps, and testacea: they burrow under ground, and line their nest with feathers.

ANCIENT PUFFIN.

(Fratercula antiqua.)

Fr. *corpore nigricante, abdomine albo, pennis cervicalibus linearibus elongatis albis.*

Puffin with a dusky body, white abdomen, and linear elongate white cervical feathers.

Alca antiqua. *Gmel. Syst. Nat.* 1. 554. *Lath. Ind. Orn.* 2. 795.

Ancient Auk. *Penn. Arct. Zool.* 2. 240. *Lath. Gen. Syn.* 5. 326. *Lath. Gen. Hist.* x. 70.

Length near eleven inches: beak with its base white, and from the nostrils to the tip black; the feathers come very forward thereon; and the eyes, in consequence, appear to be placed far back in the head: this part, as also the sides and throat, are deep black: the upper part of the body and wings are dusky black: the under part of a pure white: on the ears, just behind the eyes, spring several long narrow white feathers, which fall down on each side of the neck and unite at the lower part, forming a kind of crescent; they are somewhat curled at the base, where they are most numerous: the legs are placed very far back, and are dusky: the tail is short, rounded, and black.

Inhabits various parts of the Northern Pacific Ocean, from North America to Kamtschatka and the Kurile Islands.

PHALERIS. STARIKI.

Generic Character.

Rostrum mediocre, conico-convexum, utrinque compressum, ferè quadrangulare, ad apicem emarginatum: mandibulâ superiore apice incurvo; inferiore brevior, versus basin tumida.

Nares oblongæ ad medium rostri sitæ.

Alæ mediocres.

Pedes breves, tridactyli; *ungues* curvati.

Beak medial, conic-convex, compressed on each side, nearly quadrangular, emarginated towards the tip; the upper mandible bent down at the tip; the lower shorter, and swollen towards the base.

Nostrils oblong, placed towards the middle of the beak.

Wings medial.

Legs short, three-toed; *claws* curved.

PHALERIS. Temminck.
ALCA. Pallas, Gmel., Lath., Vieil.

TEMMINCK has judiciously separated this genus from the Puffins, in the second edition of his Manuel: he appears, however, to have been anticipated by Vieillot, in his Analyse d'une Nouvelle Ornithologie Elémentaire, in which work M. Vieillot has applied the name *Alca* to the *A. cristatella* of Gmelin, and *Larva* to the *Fratercula arctica* and *Alca im-*

pennis. The only species known reside between the continents of Asia and America, consequently their habits are but little ascertained. Temminck differs with Latham respecting the number of species, and asserts that some of those described by the latter are the young of the others; but as he gives no reasons in support of his assertion, and as the birds appear to be widely different, I have judged it best to keep them distinct, till some more certain information is obtained respecting them. They usually nidificate in holes and fissures of rocks.

PERROQUET STARIKI.

(Phaleris Psittacula.)

Ph. *corpore nigricante, abdomine albo, facie productâ, ad basim rostri coarctalâ, rostro rubro.*

Stariki with the body dusky, the abdomen white, the face produced and straightened towards the base of the beak, the beak red.

Alca Psittacula. *Pall. Spic.* 5. 13. *pl.* 2. *Gmel. Syst. Nat.* 1. 553. *Lath. Ind. Orn.* 2. 794.

Stariki. *Hist. Kamtschatka,* 155.

Perroquet Auk. *Penn. Arct. Zool.* 2. 433. *Lath. Gen. Syn.* 5. 325. *pl.* 95. *f.* 2. *Bing. Anim. Biog.* 2. 345. *Lath. Gen. Hist.* x. 69.

About the size of a Blackbird: the beak is deep red, much compressed, and convex both above and beneath: the nostrils are placed in the middle of it, and pervious; and above these there is a furrow that

reaches from the base to the middle: the head is much elongated, and the eyes are placed, apparently, far back: in the middle of the upper eyelid is a white spot; and from the hinder part of the eye springs a slender tuft of white feathers, which hangs loosely on the neck: the upper parts of the plumage, the head, and neck are black; and the under parts, from the breast, white: the thighs dusky: the legs dirty yellow: webs brown.

This species is found in flocks, in Kamtschatka, in the isles towards Japan, and on the western shores of America. Like the rest of the tribe, they are indolent and stupid birds, as the following ridiculous method of catching them sufficiently proves:—One of the natives places himself in the evening among the rocks, under a loose garment of fur, of a particular shape, with large open sleeves, when the birds, returning to their lodging places at dusk, run under the skirts and up the arm-holes, in order to shelter themselves during the night: the man concealed beneath kills them as fast as they enter, and by this means, as many are often taken in an evening as he can carry away. Their stupidity occasions them likewise very often to fly on board a ship of an evening, mistaking it for a roosting place.

They lay an egg of a dirty white or yellowish-colour, spotted with brown, about the middle of June, upon the bare rock or sand, and it is said to be very excellent eating.

DUSKY STARIKI.

(Phaleris tetracula.)

Ph. *corpore nigro subtus cinerascente, nuchâ maculis rectricibusque lateralibus apice ferrugineis, fronte subcristatâ, rostro luteo-fusco, carinâ albidâ.*

Stariki with the body black, beneath ash-coloured, the nape with spots, and the lateral tail-feathers at the tip ferruginous, the forehead slightly crested, the beak of a yellowish-brown, the tip whitish.

Alca tetracula. *Pall. Spic.* 5. 25. *pl.* 4. *Gmel. Syst. Nat.* 1. 552. *Lath. Ind. Orn.* 2. 794.

Dusky Auk. *Penn. Arct. Zool.* 2. 435. *Lath. Gen. Syn.* 5. 324. *pl.* 95. *f.* 3. *Lath. Gen. Hist.* x. 68.

Size of the preceding: length eleven inches: the beak smaller in proportion, but the upper mandible bent at the point; the colour yellow-brown; the ridge white: the irides are white, surrounded by a circle of black: the forehead is covered with downy feathers, which are pretty full, and reflexed half one way, half the other: behind the eyes a stripe of white: the head and neck are black, marked with a few obscure ferruginous spots on the nape: the upper parts of the body black; beneath cinereous, growing whitish near the vent: the wings reach to the base of the tail, which is composed of fourteen feathers, all of which, except the two middle ones, are ferruginous at the ends: legs livid: webs black.

Found in the seas between Japan and Kamtschatka: their nests are formed in fissures among the rocks:



CRESTED STARIKI.

they are very active in the water, but exceedingly clumsy and stupid on shore. Their flesh is but little valued, but their eggs are much prized: they will sometimes fly on board vessels of an evening, and are then very easily captured. Temminck supposes this to be the young of the preceding species.

CRESTED STARIKI.

(Phaleris cristatella.)

Ph. *corpore nigricante, dorso maculis ferrugineis, cristâ frontali antrorsum inclinante, rostro rubro.*

Stariki with the body dusky, the back with rusty spots, a frontal crest inclining forwards, and a red beak.

Alca cristatella. *Pall. Spic.* 5. 18. *pl.* 3. *Gmel. Syst. Nat.* 1. 552. *Lath. Ind. Orn.* 2. 794.

Black Stariki. *Hist. Kamtschatka,* 156.

Crested Auk. *Penn. Arct. Zool.* 2. 434. *Lath. Gen. Syn.* 5. 323. *pl.* 95. *f.* 4. *Lath. Gen. Hist.* x. 67.

"Length twelve inches: the beak shaped somewhat like that of the Common Puffin, but the upper mandible more hooked at the tip, and the feathers of the chin produced half way on the under one: at the angle of the mouth a callous flap: the colour of that and the beak crimson; tip of the last yellow: the head is rather small; and on the forehead is an upright crest composed of long feathers, which curve forwards: eyes small; under them a line of white, and behind them a streak composed of four or five

slender white feathers: the head and neck black: the back the same, marked with ferruginous-brown spots, changing into hoary on the rump: the under parts of a dusky-brown: the wings reach to the base of the tail, which is black, and consists of fourteen feathers; the outermost but one ferruginous at the tip; the outer one marked with indistinct white dots: legs livid: webs dusky. Inhabits the islands contiguous to Japan; sleeping in burrows on shore and fissures of rocks."—*Latham.*

FLAT-BILLED STARIKI?

(Phaleris? pygmea.)

Ph? *corpore atro, subtus cinereo, rostro nigro.*

Stariki? with the body dark-coloured, beneath cinereous, the beak black.

Alca pygmea. *Gmel. Syst. Nat.* 1. 555. *Lath. Ind. Orn.* 2. 796.

Pygmy Auk. *Penn. Arct. Zool.* 2. 431.

Flat-billed Auk. *Lath. Gen. Syn.* 5. 328. *Lath. Gen. Hist.* x. 72.

Less than the Common Sea-dove: length seven inches: beak black; ridged on the top, but on each side of the ridge much depressed: the nostrils are placed parallel to the edge of the upper mandible; and the point of the beak is somewhat curved: the visage is rather elongated, as in the Perroquet; and the sides of the head, between the beak and the eye, are furnished with a few narrow pale feathers: the

plumage on all the upper part of the body is sooty black: the chin and throat very pale: the fore part of the breast and belly paler than above, and greatly inclining to ash-colour: the belly dirty white in the middle: legs dusky.

Inhabits the islands between Asia and North America. Temminck says that this is the young of the foregoing bird, but the form and colour of the beak appear to controvert that opinion. Dr. Latham has made a separate division for this species, in the new edition of his Synopsis, on account of the depressed beak with which it is furnished.

ALCA. AUK.

Generic Character.

Rostrum capite æquale, rectum, longius quam altum, utrinque compressum, transversim sulcatum: mandibulâ superiore apice aduncâ, inferiore subtus angulosâ.

Nares lineares, laterales, ad medium rostri sitæ.

Alæ brevissimæ.

Pedes breves, tridactyli; *ungues* subcurvati.

Beak as long as the head, straight, longer than high, compressed on each side, transversely grooved; the upper mandible hooked at the tip, the lower angulated beneath.

Nostrils linear, lateral, placed towards the middle of the beak.

Wings very short.

Legs short, three-toed; the *claws* slightly curved.

ALCA. Linn., Gmel., Brun., Lath., Temm., &c.
LARVA. Vieil.

THIS extraordinary genus, of which there is but one species known, approximates very closely to the true Penguins, or the birds of the second division of this family; they also bear a great resemblance to the Razor-bills, except in the length of the wings, which in this bird are very short, so short as totally to incapacitate it for flying: it lays but one egg.



Griffith

GREAT AUK.

GREAT AUK.

(Alca impennis.)

AL. *corpore nigro, subtus à medio jugulo, remigibus secundariis apice, maculâque ovatâ utrinque ante oculos, albis.*

Auk with the body black, beneath from the middle of the jugulum, the tips of the secondary quills, and an ovate spot before the eyes, white.

Alca impennis. *Linn. Syst. Nat.* 1. 210. *Gmel. Syst. Nat.* 1. 550. *Brun. Orn. Boreal. no.* 105. *Lath. Ind. Orn.* 2. 791.

Alca major. *Briss. Orn.* 6. 85. *pl.* 7.

Penguin. *Raii, Syn.* 118. *Edw. Glean. pl.* 147.

Le grand Pingoin. *Buff. Hist. Nat. Ois.* 9. 393. *pl.* 29. *Buff. Pl. Enl.* 367. *Cuv. Reg. Anim.* 1. 512.

Pingouin brachyptere. *Temm. man. d'Orn.* 2 *Edit.* ii. 939.

Great Auk. *Penn. Brit. Zool.* 2. 229. *pl.* 81. *Penn. Arct. Zool.* 2. 424. *Lath. Gen. Syn.* 5. 311. *Lew. Brit. Birds,* 6. *pl.* 222. *Walc. Syn.* 1. *pl.* 86. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 162. *Lath. Gen. Hist.* x. 55.

THIS bird is in length three feet: the beak is black; four inches and a quarter long; both mandibles are crossed obliquely with several ridges and furrows, which meet at the edges: two oval-shaped white spots occupy nearly the whole space between the beak and the eyes: the head, back part of the neck, and all the upper parts of the body and wings are covered with short, soft, glossy black feathers: all the under sides of the body and the tips of the lesser quills are white: the wings are very short, the longest quill-feathers not exceeding four inches in length: the legs are black, short, and placed near the vent.

This species is not numerous any where: it inhabits Norway, Iceland, the Ferroe Islands, Greenland, and other northern regions; and but very rarely visits Britain, and then only the most northern parts, among the Orkneys.

The female lays but one egg, which is white, irregularly marked with purplish lines, and blotched with dark rusty spots at the larger end; and it is said that if the egg be taken away she will not lay a second: this will account for its rarity. The young are hatched very late in the season: they feed upon plants, but the old upon fishes, in search of which they dive and swim under water with the greatest rapidity, for which their short wings are easily calculated, as they perform the office of fins: they are very rarely seen on shore, and walk very badly: they are extremely shy.

DIVISION II.

Rostrum *subcompressum, aut ferè cylindricum*; pedes *tetradactyli*; alæ *breves*; remiges *et* rectrices *nullæ*.
Beak slightly compressed, or nearly cylindric; *legs* four-toed; *wings* short; no *quills* or *tail-feathers*.

The extraordinary birds comprised in this section of the family are totally incapable of flying, their wings being completely destitute of quills, and appearing at first sight as if covered with scales: the tail-feathers are also wanting: their legs are placed very backward, and the birds when at rest are supported on the tarsi: their feet have four toes. They are all natives of the antarctic regions; and while swimming they are almost immersed in the water, the head alone appearing above the surface, rowing themselves with their finny wings, as with oars: they seldom quit the sea except for the purpose of nidification: during the tedious process of incubation they are compelled, it is said, to trail their full length on their eggs, in consequence of their awkward structure.

APTENODYTES. PENGUIN.

Generic Character.

Rostrum longum, lævigatum, rectum, subulatum, tenuiusculum, cylindricum, acutum; mandibulâ superiore versus apicem declive, inferiorem longiore.

Nares plumis tectæ.

Remiges et *rectrices* nullæ.

Pedes breves, tetradactyli.

Beak long, smooth, straight, subulated, slender, cylindric, pointed; the upper mandible bent down towards the tip, longer than the lower.

Nostrils covered with feathers.

Quills and *tail-feathers* wanting.

Legs short, four-toed.

APTENODYTES. Forst., Gmel., Lath., Cuv., &c.

THE true Penguins have the beak slender, long, and pointed; the upper mandible is slightly arcuated on the top, and covered for a third of its length with feathers, in which the nostrils are placed; from the latter to the tip is a groove.



Griffith.

PATAGONIAN PENGUIN.

PATAGONIAN PENGUIN.

(Aptenodytes Patagonica.)

Ap. *rostro pedibusque nigris, maculâ ad aures utrinque flavo-aureâ collum ambiente.*

Penguin with the beak and legs black, and a golden yellow spot near the ears, on each side, encompassing the neck.

Aptenodytes Patagonica. *Gmel. Syst. Nat.* 1. 556. *Lath. Ind. Orn.* 1. 878.

Manchot de la Nouvelle Guinée. *Sonner. Voy. Ind.* 179. *pl.* 113.

Grand Manchot des isles Malouines. *Buff. Hist. Nat. Ois.* 9. 399. *pl.* 30. *Buff. Pl. Enl.* 975. *Cuv. Reg. Anim.* 1. 513.

Patagonian Penguin. *Forster, Voy.* 2. 214. *Lath. Gen. Syn.* 6. 563. *Lath. Gen. Hist.* x. 390.

The Patagonian Penguin is thus commemorated by Latham:—"This is the largest of the species known, being four feet three inches in length, and stands erect at least three feet; the weight forty pounds: the beak is four inches and a half in length, more slender in proportion than in any of the species, and bends towards the tip; the colour of it black for two-thirds of the length, and from thence to the point yellowish; the under mandible orange at the base and black at the tip: the tongue is half the length of the beak, and armed on each side with spikes turning backwards: the irides are hazel: the head, throat, and hind part of the neck are of a deep brown: the back of a deep ash-colour, each feather bluish at the tip: the under parts are pure white: on each side of the head, beginning under the eye, and behind it, is a broad stripe of fine yellow; this advances forward as it proceeds down the neck, where

it grows narrower and paler, and at last blends itself with the white on the breast; this appearance, however, is only when the neck is stretched, for the state in which the bird usually carries itself is with the head rather crouched in between the shoulders, where the yellow appears encircling the neck as a necklace: the wings are of the usual form, but larger in proportion: the legs scaly and black."

Natives of the Falkland Islands, New Guinea, New Georgia, and other parts adjoining the Antarctic seas. Their principal food consists of crabs, testacea, and mollusca: they frequent sequestered places, and occur in large flocks: their flesh, although black, is eatable.

CHILOE PENGUIN?

(Aptenodytes? Chiloensis.)

Ap? *corpore lanuginoso cinereo tecto.*
Penguin? with the body clothed with an ash-coloured down.
Aptenodytes Chiloensis. *Gmel. Syst. Nat.* 1. 559. *Lath. Ind. Orn.* ii. 881.
Diomedea Chilensis. *Molin. Chil. p.* 210.
Chiloe Penguin. *Lath. Syn. Sup.* ii. 361. *Lath. Gen. Hist.* x. 388.

Size of a Duck: the body covered with a kind of ash-coloured down, of so fine a texture as to admit of being spun into thread, and made into garments, coverings of heads, and other purposes. Inhabits the Archipelago of Chiloe. May not this be a young bird?

CHRYSOCOMA. GORFOU.

Generic Character.

Rostrum basi rectum, lateratim compressum, obliquè sulcatum; mandibulâ superiore aduncâ, inferiore apice rotundatâ.	*Beak* straight at the base, laterally compressed, obliquely grooved; the upper mandible hooked, the lower rounded at the tip.
Nares plumis tectæ.	*Nostrils* clothed with feathers.
Remiges et *rectrices* nullæ.	*Quills* and *tail-feathers* wanting.
Pedes breves, tetradactyli.	*Legs* short, four-toed.

CHRYSOCOMA. Cuv.?
APTENODYTES. Forst., Gmel., Lath.
CATARRACTES. Briss.
PHAETON. Linn.
EUDYPTES. Vieill.

THESE birds are distinguished from those of the preceding genus by the beak being stronger, compressed, and pointed; it has the top rounded, and the tip but little arched; the groove in which the nostrils are placed terminates obliquely at the lower edge at one-third of the length from the tip. From the Sphenisques they may be distinguished by the

form of the lower mandible, which is rounded at the tip, instead of being truncated.

HOPPING GORFOU.

(Chrysocoma saltator.)

Ch. *rostro rufo-fusco, pedibus flavescentibus, cristâ frontali erectâ, auriculari deflexâ sulphureâ.*

Gorfou with a red-brown beak, the legs yellowish, an erect frontal, and deflexed auricular crest, of a sulphur colour.

Aptenodytes chrysocome. *Gmel. Syst. Nat.* 1. 555. *Lath. Ind. Orn.* 2. 878.

Manchot sauteur. *Buff. Pl. Enl.* 984. *Buff. Hist. Nat. Ois.* 9. 409.

Le Gorfou sauteur. *Cuv. Reg. Anim.* 1. 513.

Crested Penguin. *Lath. Gen. Syn.* 6. 561. *Lath. Gen. Hist.* x. 385.

A BEAUTIFUL bird, measuring nearly two feet in length: beak three inches long, and of a deep red; with a dark groove running on each side to the tip: the irides are dull red: the head, neck, back, and sides are black: on each eye is a stripe of pale yellow feathers, elongated into a crest of near four inches in length; above this the feathers on the head are lengthened and stand upward: the wings are black, edged with white; the inside of them and the breast, and all the under parts of the plumage white: the legs are pale orange: the claws dusky. The female has a pale yellow streak over the eye, and is destitute of the crest.



Griffith

HOPPING GORFOU.

In common with the rest of the group to which it belongs, this species is very stupid, and when struck at does not offer to move from its situation. When alarmed, or in anger, it erects its crest. The females lay their eggs on the bare ground, in a hole formed in the earth, by themselves; they are larger than those of a Duck, and nearly white.

This species is very common in the Falkland Islands, and other parts of the southern regions, and frequently jumps three or four feet out of the water upon meeting with the slightest obstacle; whence they have obtained the name of Hopping Penguin, and Jumping Jack, from our sailors.

PAPUAN GORFOU.

(Chrysocoma papua.)

Ch. *rostro pedibusque rubicundis, maculâ occipitali albâ.*
Gorfou with reddish beak and legs, and a white occipital spot.
Aptenodytes papua. *Gmel. Syst. Nat.* 1. 556.
Le Manchot papoa. *Sonner. Voy. Ind.* 181. *pl.* 115.
Papuan Penguin. *Lath. Gen. Syn.* 6. 565. *Lath. Gen. Hist.* x. 388.

Length thirty inches: beak red, four inches long; the upper mandible slightly bent at the tip; the under a little pointed: the irides reddish-yellow: the head and upper half and back of the neck bluish-dusky-black: over the eye, on each side of the head, is a large patch of white, which reaches backwards nearly

to the occiput; and across the top of the head is a bar of the same colour, uniting the patches together: the under parts of the body are white: the wings are black above, with their tips, lower edge, and insides white: tail wedge-shaped: legs reddish: webs dusky: claws black.

Inhabits New Guinea, Falkland Islands, and Kuërguelen's Land.

COLLARED GORFOU.

(Chrysocoma torquata.)

Ch. *rostro pedibusque nigris, areis oculorum nudis sanguineis, semitorque albo.*

Gorfou with the beak and legs black, the space round the eyes naked, and red, and white collar half round the neck.

Aptenodytes torquata. *Gmel. Syst. Nat.* 1. 558. *Lath. Ind. Orn.* 2. 880.

Manchot à collier de la Nouvelle Guinée. *Sonner. Voy. Ind.* 181. *pl.* 114.

Collared Penguin. *Lath. Gen. Syn.* 6. 571. *Lath. Gen. Hist.* x. 391.

Inhabits New Guinea and other southern islands. Length eighteen inches: beak and irides black: the eye surrounded with a naked blood-red skin: the head, throat, hind part of the neck, sides, back, wings, and tail black: the fore part of the neck, breast, belly, and thighs white, the colour extending nearly round the upper part of the neck as a collar: the legs are black.

RED-FOOTED GORFOU.

(Chrysocoma Catarractes.)

Ch. *rostro pedibusque rubris, capite fusco.*
Gorfou with the beak and legs red, the head brown.
Phaëton demersus. *Linn. Syst. Nat.* 1. 219.
Aptenodytes Catarractes. *Gmel. Syst. Nat.* 1. 558. *Lath. Ind. Orn.* 2. 881.
Catarractes. *Briss. Orn.* 6. 102.
Red-footed Penguin. *Edw. Glean. pl.* 49. *Lath. Gen. Syn.* 6. 572. *Lath. Gen. Hist.* x. 386.

This bird is the size of a Goose: the beak is red; both mandibles pointed, and the upper one but slightly bent: the fore part of the head is dirty brown: the back part, and all the upper parts of the neck and body of a dingy purple: all the under parts white, in some birds undulated: wings brown, edged with white: tail short and black: legs, toes, and webs dirty red: claws brown.

Inhabits the South Seas: probably a young bird.

LITTLE GORFOU.

(Chrysocoma minor.)

Ch. *rostro nigro, pedibus albidis.*
Gorfou with the beak black, the legs whitish.
Aptenodytes minor. *Gmel. Syst. Nat.* 1. 558. *Lath. Ind. Orn.* 2. 881.
Little Penguin. *Lath. Gen. Syn.* 6. 572. *pl.* 103. *Lath. Gen. Hist.* x. 387. *pl.* 180.

Figured and described by Latham: "Size of a Teal: length fifteen inches: beak an inch and a half long; in shape like that of the Red-footed; colour dusky; the under mandible somewhat truncated, and blue at the base: irides livid: the upper parts of the bird, from head to tail, appear cinereous blue, the ends of the feathers being of that colour, but the base of them is brown-black; the shafts of each feather black: round the eye and a little way below on each side is a bed of pale brownish-ash colour: the under parts, from chin to vent, white: wings dusky above, and white beneath: tail very short, and consists of sixteen stiff feathers, but is scarce perceivable, except in the feathers appearing a little elongated at that part: legs dull red: webs dusky: claws black."

Not unfrequent on the rocks of the southern parts of New Zealand, especially in Dusky Bay: they lay their eggs in deep burrows formed on the sides of the hills: the natives knock them down with sticks, and feed upon their flesh.

SPHENISCUS. SPHENISQUE.

Generic Character.

Rostrum basi rectum, lateratim compressum, obliquè sulcatum; mandibulâ superiore aduncâ, inferiore truncatâ.	*Beak* straight at the base, laterally compressed, obliquely grooved; the upper mandible hooked; the lower truncated.
Nares ad medium rostri sitæ, denudatæ.	*Nostrils* placed near the middle of the beak, and naked.
Remiges et *rectrices* nullæ.	*Quills* and *tail-feathers* wanting.
Pedes breves, tetradactyli.	*Legs* short, four-toed.

SPHENISCUS. Briss., Cuv.
APTENODYTES. Gmel., Lath.
EUDYPTES. Vieill.
DIOMEDEA. Linn.

THESE birds have the beak straight, compressed, irregularly channelled at its base, the tip of the upper mandible hooked, and of the lower truncated: the nostrils are placed in the middle, and not clothed with feathers.

CAPE SPHENISQUE.

(Spheniscus demersus.)

Sp. *rostro pedibusque nigris, superciliis albis, fasciâ pectorali nigrâ.*

Sphenisque with the beak and legs black, the eyebrows white, and a black pectoral band.

Diomedea demersa. *Linn. Syst. Nat.* 1. 214.

Aptenodytes demersa. *Gmel. Syst. Nat.* 1. 557. *Lath. Ind. Orn.* 2. 879.

Spheniscus. *Briss. Orn.* 6. 97.

Black-footed Penguin. *Edw. Glean. pl.* 94.

Cape Penguin. *Lath. Gen. Syn.* 6. 566. *Lath. Gen. Hist.* x. *p.* 381.

Variety.—Spheniscus nævius. *Briss. Orn.* 6. 99. *pl.* 9.

Manchot à bec tronqué. *Buff. Hist. Nat. Ois.* 9. 411. *Buff. Pl. Enl.* 380.

Black-footed Penguin. *Edw. Glean. pl.* 94. *f.* 1. *Lath. Gen. Syn.* 6. 567. *A.*

Length twenty-one inches: beak dusky, marked with a transverse yellowish band near the tip; from the base, about half way, is a groove in which the nostrils are placed: the upper parts of the plumage are black: the sides of the head and throat dingy grey: the wings are black above, with the lower edge white, and the under part varied with black and white: the breast, belly, thighs, and under tail-coverts white: tail wedge-shaped: legs, webs, and toes black.

A variety or sexual distinction is described by Brisson, with the upper part of the head, the back, and rump blackish: each feather with a deep black dash down the shaft, and some very small whitish-grey



CAPE SPHENISQUE.

dots on each web: on each side of the head is a stripe of white, which commences at the base of the beak and passes over the eyes to the occiput, and uniting to the white on the sides of the neck: the sides of the head and throat are blackish-brown, marked with small dirty white spots: on the breast is an arched blackish-brown band, which passes in a line on each side quite to the thighs.

Found in the vicinity of the Cape of Good Hope: the female lays two white eggs, the size of those of a Duck; they are reckoned delicious eating, and are much prized: these birds are said to climb some way up the rocks in order to make their nest, notwithstanding the awkwardness of their manners: they swim and dive admirably.

MAGELLANIC SPHENISQUE.

(Spheniscus Magellanicus.)

Sp. *rostro nigro fasciâ purpurascente, superciliis albis, fasciâ pectorali et torque medio colli nigris.*

Sphenisque with the beak black, banded with purple, the eyebrows white, a pectoral fascia and collar on the middle of the neck black.

Aptenodytes Magellanica. *Gmel. Syst. Nat.* 1. 557. *Lath. Ind. Orn.* 2. 880.

Magellanic Penguin. *Lath. Gen. Syn.* 6. 569. *Lath. Gen. Hist.* x. 383.

Length from two feet to thirty inches: the beak black, transversely banded near the tip: the irides

red-brown: the sides of the head, under the eye and the chin, black: from the base of the beak, through and over the eye, surrounding the black on the sides of the head and meeting under the throat, is a white streak: the rest of the head and neck is black, as are also the upper parts of the body and wings: the under parts of the body, from the breast, white, a narrow band of black excepted, which passes at a little distance within the white on the breast, and downwards on each side, beneath the wings, quite to the thighs: the legs are reddish flesh-colour, irregularly spotted on the toes: claws black.

Inhabits Terra del Fuego, the Straits of Magellan, and other southern parts, in the utmost profusion: often seen by thousands retiring to rest for the night: when they swim, only the neck and shoulders appear out of the water, and they advance with great rapidity; if they meet with any obstacle they leap four or five feet out of the water, and dipping into it again continue their route. They are rather bold birds, and if molested will frequently attack and bite the intruder by the legs, so as to fetch blood. Their eggs are larger than those of a Goose, are two in number, and are said to be good eating.

ANTARCTIC SPHENISQUE?

(Spheniscus? antarcticus.)

Sp? *rostro atro, pedibus rubicundis, lineâ gulari nigrâ.*

Sphenisque? with the beak dark-coloured, the legs reddish, and a black line on the throat.

Aptenodytes antarctica. *Gmel. Syst. Nat.* 1. 557. *Lath. Ind. Orn.* 2. 879.

Antarctic Penguin. *Lath. Gen. Syn.* 6. 565. *Forst. Voy.* 1. 98. *Lath. Gen. Hist.* x. 389.

This rather exceeds two feet in length: its beak nearly three inches long, and black; the under mandible somewhat truncated: the irides are pale yellow: the prevailing colour of the upper parts of the body is black; of the under pure white: the wings are leaden-black, with their lower margins and inside white, and tips black: on the chin is a narrow blackish streak, which passes backwards to the occiput, with an angulation near the ears: the tail is black: the legs are flesh-coloured: the soles of the feet black.

Inhabits, like its congeners, various parts of the Antarctic Seas: it is frequently observed on the icebergs and islands in plenty.

NEW HOLLAND SPHENISQUE.

(Spheniscus Novæ Hollandiæ.)

Sp. *rostro nigro, pedibus fusco-incarnatis, corpore supra fusco pennis apice griseo, subtus gulâque albo.*

Sphenisque with a black beak, brown flesh-coloured legs, the body brown above, with the tips of the feathers grey, beneath and throat white.

New Holland Penguin. *Lath. Gen. Hist.* x. 388.

"Length two feet or more: beak black, the upper mandible hooked at the tip, the under truncated: plumage above brown, the feathers tipped with grey, giving a mixed appearance: chin, throat, and the rest of the parts beneath rufous-white: wings brown: legs pale flesh-coloured brown: webs black. Inhabits New Holland."—*Latham.*

I cannot quit this curious family without noticing the following extraordinary birds (which are described in the new edition of Dr. Latham's Synopsis), whose location I am at a loss to fix: from his description I suspect they must either be the young of some other species, or form the types of a new genus, especially if he be correct in saying that they possess but three toes. The first is the

Hairy Penguin. *Lath. Gen. Hist.* x. *p.* 392.

"Length two feet six inches: beak three inches and a half; black; the upper mandible bent at the

tip, with a furrow running the whole of its length, but no appearance of nostrils: tongue half the length of the beak, armed with numerous spikes, tending backwards: in the palate a long cleft, passing deep into the beak: eyelids prominent, but the parts round them covered with short downy hairs: the whole bird, otherwise, covered with a thick-set hair, having no resemblance either to down or feathers: for the most part two inches in length: wings hanging down, and covered in the same manner, but the hair short in proportion: tail not distinguishable from the rest of the plumage: colour of the whole uniform brown, not paler, as is usual in other birds, beneath: legs very stout and scaly, deep brown, webbed quite to the toes, which are *three* in number, all placed forwards: claws stout and black, the middle one sharp at the inner edge. Inhabits South America."

The second is the

Woolly Penguin. *Lath. Gen. Hist.* x. 392. *pl.* 181.

"The total length of this singular bird is two feet eight inches; in shape, as it stands upright, giving the idea of a bottle. The beak to the gape three inches and three quarters; bare space beneath it an inch and a half; pale brownish-yellow, with a blackish point; from the base to about one-third, a finely granulated skin or cere, and a seam continued to the point, but the nostrils are not clearly distinguishable; from the point of the beak to the eye four inches and a quarter: whole length of the wing one foot; to the head six inches: body in general covered with a kind of downy brown fur, in some parts three inches in length: orbits somewhat downy, but not quite

bare: circuit of the body, just above the legs, two feet ten inches; round the neck at the throat, eleven inches and a half; round the base of the beak four inches and a half: length of foot seven inches: toes *three* in number; all placed forwards; colour yellow: toes and webs nearest the claws brown-black; the rest yellow: the webs continue quite to the claws, which are nearly straight: claws black. Native place unknown."

The third and last of these singular animals is that most surprising bird the Apteryx of Shaw, which, as its name implies, is totally destitute of wings: the following are Shaw's characters.

APTERYX.	APTERYX.
"*Rostrum* longum, gracile, rectiusculum, basi cerâ tectum, sulco tubulato laterali utrinque exaratum, apice subtumido subincurvo.	*Beak* long, slender, nearly straight, covered at the base by a cere, marked on each side by a tubular furrow, slightly swelled and bent at the tip.
Nares? lineares, inconspicuæ, propè apicem rostri, ad finem sulci tubulati.	*Nostrils?* linear, inconspicuous, near the tip of the beak, at the end of the tubular furrow.
Alæ rudimenta tantum, monodactyla, subunciali, unguiculo terminali.	*Wings* rudiments only, consisting of a single joint or finger, about an inch in length, and terminated by a small claw or spur.
Pedes compedes, breves, validi, gallinacei, tetradactyli; *digito* postico subinteriore, brevissimo.	*Feet* comped, short, strong, gallinaceous, and tetradactyle; the *hinder* or subinterior *toe* very short.
Cauda nulla.	*Tail* none."

SOUTHERN APTERYX.

(Apteryx Australis.)

Ap. *griseo-ferruginea, rostro pedibusque fusco-flavescentibus.*
Ferruginous-grey Apteryx with yellowish-brown beak and legs.
Apteryx Australis, *or* Southern Apteryx. *Shaw, Nat. Misc.* v. xxiv. *pl.* 1057, 1058.
Apteryx. *Temm. man. d'Orn. Ed.* 2. *Anal. p.* cxiv.
Apterous Penguin. *Lath. Gen. Hist.* x. 394.

"Size of a Goose: length two feet and a half: beak yellowish-brown, long and slender, somewhat in the form of (that of) the Patagonian Penguin; length from the gape to the tip six inches and three quarters; at the base rather stout, and covered with a kind of cere; it is also a trifle enlarged at the end, and somewhat curved; the under mandible shutting beneath the other: the nostrils linear near the tip of the beak, scarcely to be detected, placed at the end of a tubular furrow: plumage ferruginous-grey; the feathers not greatly unlike those of the New Holland Cassowary (*Emu*), but only one from each shaft: the wings not perceivable, except on close examination, being only a small stump, with a claw or spur at the end, furnished with a few straggling feathers, and quite hid in the plumage; some of the feathers of which are weak, and four inches or more long, and the edges of them incline to dusky, giving a mottled or mixed appearance: there is no appearance of a tail: the legs are short and stout, the colour of the beak, but rather darker: the feet have three toes before, *separate*, and one behind, but the last is placed

much within, and so high up as to be useless, with no apparent membrane between the toes: claws strong, sharp, very little bent; the inner one almost straight. Inhabits New Zealand: brought from the south coast by Captain Barclay, of the ship Providence, who presented it to Dr. Shaw."

Latham, who examined this bird with Shaw, makes the following memoranda: "No appearance of nostrils was to be detected, but a furrow ran the whole length (of the beak), at the end of which were two minute holes, into which a bristle being introduced, passed quite up to the base, and no doubt were the nostrils."—"The form of the foot is not greatly unlike that of the Dodo, and in the above specimen the toes were not connected by an intervening membrane; yet from certain inequalities on the sides it is possible that there may have been one, and that it had been eaten away by insects."

PELECANIDÆ.

THE feet of the birds comprised in this family exhibit their chief characteristic distinction; these parts being furnished invariably with four toes, *all* of which are united together by the same membrane: their beak is longer than the head: it is strong and robust, sometimes compressed, and armed on its edges with saw-like denticulations, and generally bent down, or hooked, at the tip: their legs are very short, and the tibiæ are naked on the lower part in some of the genera, and totally clothed with feathers in the rest: their wings are usually long and powerful.

In habit some of these birds approximate towards the Falcons, the genus Fregatta especially (as justly pointed out by my friend N. A. Vigors, Esq. in his acutely written paper on the Natural Affinities, &c. of Birds, read before the Zoological Club of the Linnean Society, and also before the Society itself, and since published in their Transactions); whose resemblance is so complete as to have led Linnæus to name the only species known by him, Pelecanus *Aquilus:* its form partakes amazingly of that of the Eagles, and there is much similarity in the method of catching and securing its prey to that adopted by the Sea Eagles: this remarkable similitude among the Natatores is a most satisfactory proof that the doctrine of the circular distribution of animated beings, laid down by the learned author of the Horæ Entomologiæ, is in accordance with the plan of Nature, in

spite of the prejudices which have arisen from the adoption of a quinary division of his groups, which, as far as my limited knowledge of zoology extends, appears to be perfectly natural: however, as the plan of this work is not intended for the discussion of any theoretical views, I shall merely endeavour to promote the investigation of them by attempting to arrange its subsequent materials in conformity with the above doctrine, leaving the theorist to judge for himself how far the arrangement militates against the facts exhibited by Nature herself; observing, by the way, that other instances may be pointed out, showing the connexion between these birds and the Accipitres, or *Rasores, Illig.*; such as their habit of perching on trees, feeding voraciously and often upon living animals, and also the long and powerful flights that they are enabled to take by means of their strong and expansive wings.

PHALACROCORAX. CORMORANT.

Generic Character.

Rostrum longum, rectum, compressum; mandibulâ superiore apice valde adunco, unguiculato; inferiore compressâ, apice truncato, subcurvato.

Facies gulaque nudæ.

Nares basales, lineares, absconditæ.

Pedes validi, brevi; *tibiæ* plumosæ; *unguis* medius margine internâ denticulatâ.

Beak long, straight, compressed; the upper mandible with its tip much hooked, and furnished with a nail; the lower compressed, its tip truncated, and slightly curved.

Face and *throat* naked.

Nostrils basal, linear, hidden.

Legs strong, short; *tibiæ* feathered; the middle *claw* with its inner edge denticulated.

PHALACROCORAX. Briss., Cuv.
PELECANUS. Linn., Gmel., Lath.
CORVUS. Ray.
CARBO. Meyer, Temm.
HALIEUS. Illig.
HYDROCORAX. Vieil.

CORMORANTS are most excellent divers, and pursue their prey with astonishing facility beneath the surface of the water; but upon land they are

extremely awkward in their movements, as their legs are placed so far backwards on their body as to cause them to maintain a nearly vertical position, somewhat similar to that of the birds of the preceding family, with which they are also connected by their method of swimming; during which operation the head and part of the neck alone remain out of the water. They are excessively voracious, and subsist chiefly upon fresh-water fishes, particularly eels. In common with the Pelicans, they perch on trees: their nests are generally placed on the ground or the ledges of rocks, and are composed of rushes, fuci, &c. roughly interwoven. They fly with rapidity. Their tail is rather long and furnished with strong feathers, whose shafts are elastic, and help to support their body while walking.

COMMON CORMORANT.

(Phalacrocorax Carbo.)

Ph. *fusco-niger, dorso nigro undulato, collo antice rostroque apice albo variegato, rectricibus quatuordecim.*

Brown-black Cormorant with the back waved with black, the fore part of the neck and tip of the beak variegated with white, tail-feathers fourteen.

Pelecanus Carbo. *Linn. Syst. Nat.* 1. 216. *Gmel. Syst. Nat.* 1. 573. *Lath. Ind. Orn.* 2. 886.

Corvus aquaticus. *Raii, Syn.* 122. *A.*

Phalacrocorax. *Briss. Orn.* 6. 511. *pl.* 45.

Le Cormoran. *Buff. Hist. Nat. Ois.* 8. 310. *pl.* 26. *Buff. Pl. Enl.* 927. *Cuv. Reg. Anim.* 1. 524.



COMMON CORMORANT.

Grand Cormoran. *Temm. man. d'Orn.* 1. 587. *Id.* 2 *Edit.* ii. 894.

Cormorant, or Corvorant. *Penn. Brit. Zool.* 2. 291. *Albin. Birds,* 2. *pl.* 81. *Lath. Gen. Syn.* 6. 593. *Lew. Brit. Birds,* 6. *pl.* 263. *Walc. Syn.* 1. *pl.* 92. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 381. *Leach, Zool. Misc.* 3. *Lath. Gen. Hist.* x. 415.

Crested Cormorant. *Bew. Brit. Birds,* 2. 388.

Length about thirty inches: during the winter the beak is a blackish-ash: the naked space round the eyes is greenish-yellow: the pouch yellowish: the irides green: under the throat is a broad white or whitish collar, the extremities of which reach just beneath the eyes: the top of the head, neck, breast, all the under parts, and the rump, are black glossed with green: on the neck are several small whitish stripes: the feathers on the top of the back and the wings are ashy-brown or bronze-colour in the middle, edged by a broad band of black, glossed with green: the quills and tail-feathers are black: the legs are black. In the summer the occiput and part of the nape become ornamented with long feathers, which form a kind of crest glossed with deep green: the colour on the throat becomes of a pure white: on the top of the head, and on great part of the neck, and on the thighs, are several shaded, long, silky feathers, of a pure white colour: the rest of the plumage resembles that of the winter. The young of the year have the top of the head, the nape, and the back of a deep brown, slightly glossed with green: the collar is of an ashy-white: the fore part of the neck and all the under parts are grey-brown, varied

with whitish, particularly on the breast and in the middle of the belly: the feathers on the top of the back, the scapulars, and wing-coverts are ashy-grey in the middle, edged with deep brown: the beak is clear brown: the irides brown.

This bird is common in the northern countries of the old and new worlds, especially on the coasts of Holland, and on those of England and France; but rare in the interior, or towards the south. It builds, according to circumstances, either in the cliffs of the rocks, or trees, and among rushes: the female laying three or four eggs equally thick at each end, and of a greenish-white colour and irregular calcareous surface. Its food consists of fishes, but more particularly eels. In winter they disperse along the shores, and visit the fresh waters, where they commit great depredations among the fish: they are remarkably voracious, having a most rapid digestion: they are very cautious, except when they have gorged themselves, when they become so stupid that it is frequently an easy thing to take them in a net, or even by means of a noose thrown over their heads. Their smell, when alive, is excessively rank and disagreeable, and their flesh so disgusting, that even the Greenlanders will rarely eat them.

On the rocks of the sea-coast it is not an uncommon thing to see several of these birds with extended wings drying themselves in the wind: in this position they remain sometimes nearly an hour without once closing their wings; and as soon as these are sufficiently dry to enable the feathers to imbibe the oil, they press this substance from the receptacle on their

rumps, and dress their feathers with it. It is only in one particular state that this oily matter can be spread on them, when they are somewhat damp, and the instinct of the birds teaches them the proper moment.

Cormorants were formerly trained in this country for the purpose of catching fish. They were kept with great care in the houses; and when taken out for fishing they had a leather thong placed round their necks to prevent them from swallowing their prey: they were also hooded till brought to the water's edge. On this subject Willoughby says— "When they come to the rivers they take off their hoods, and having tied a leather thong round the lower part of their necks, that they may not swallow down the fish they catch, they throw them into the river. They presently dive under water, and there for a time, with wonderful swiftness, they pursue the fish, and when they have caught them, they rise presently to the top of the water, and pressing the fish lightly with their bills, they swallow them, till each bird hath in this manner swallowed five or six fishes; then their keepers call them to the fist, to which they readily fly, and, little by little, one after another, vomit up all their fish, a little bruised with the nip they gave them in their bills. When they have done fishing, getting the birds on some high place, they loose the string from their neck, leaving the passage to the stomach free and open; and for their reward they throw them part of the prey they have caught, to each, perchance, one or two fishes,

which they by the way, as they are falling in the air, will catch most dexterously in their mouths."

Notwithstanding the stupidity of these birds, they speedily become remarkably tame. Montagu relates the following anecdotes of the identical bird which is now in the British Museum, and which he procured alive, and kept for some years. "As soon as he received it and it was liberated, it followed the servant who released it, and was offered every sort of food at hand, all of which was equally refused; not even raw flesh was acceptable, and no fish could be procured to satisfy its hunger; in consequence we (he) crammed it with flesh, which was taken very reluctantly; but even with this rough handling, its formidable beak was not made use of offensively. After feeding it was placed on a stool in an adjoining room, where it sat perfectly contented, and adjusted its disconcerted plumage. Observing it so perfectly reconciled to its new abode, and having retired to the library, leaving both doors open, with the intention of returning, we were astonished, in a few minutes, to see the stranger walk boldly into the room, while in conversation with a friend, and coming towards us with the greatest confidence and familiarity, joined us at the fire-side, where it resumed the task of adjusting its feathers. From hence we removed it to an aquatic menagerie, to which it was carried without the least offensive resistance; but the sight of water made it restless, and when liberated, it instantly plunged in and dived incessantly for a considerable time, in hopes of prey; and after searching every

part of the pond without obtaining a single fish, it appeared to be convinced there were none, and never made any other attempt for three days, during the whole of which time it was crammed with flesh, not being able to procure any fish."—"It lives in perfect harmony with a Whistling Swan, a Bernicle Goose, various sorts of Ducks, and other birds; but if it perceive a Gull with a piece of fish, it immediately gives chase; if, however, the Gull has time to swallow it, no resentment is offered; the sight of it created the desire of possession, and that desire ceases with its disappearance. If it get out, it never attempts to ramble, but, walking direct to the house, enters the first open door without deference to any one, regardless even of a dog, and in fact is troublesomely tame."

The specimen of which the above is related was captured in the British Channel in the spring of 1808, and at that period its plumage was in the state described and figured by Bewick as the Crested Cormorant; but after its autumnal moulting it became that of the common species, thereby putting the identity of the two supposed species beyond a doubt.

SHAG CORMORANT.

(Phalacrocorax Graculus.)

Ph. *corpore viridi-nigro, subtus fusco, rectricibus duodecim, pedibus nigris.*

Cormorant with the body green-black, beneath brown, tail-feathers twelve, the legs black.

Pelecanus Graculus. *Linn. Syst. Nat.* 1. 217. *Gmel. Syst. Nat.* 1. 574. *Lath. Ind. Orn.* 2. 887.

Phalacrocorax minor. *Briss. Orn.* 6. 516.

Corvus aquaticus minor. *Raii, Syn.* 123. *A.*

Petit Cormoran, ou Nigaud. *Buff. Hist. Nat. Ois.* 8. 319. *Temm. man. d'Orn.* 589. *Id.* 2 *Edit.* ii. 897. *Cuv. Reg. Anim.* 1. 525.

Shag, or Crane. *Will. Orn.* 330. *pl.* 63. *Penn. Arct. Zool.* 2. 508. *Lath. Gen. Syn.* 6. 598. *Lew. Brit. Birds,* 7. *pl.* 264. *Walc. Syn.* 1. *pl.* 93. *Mont. Orn. Dict.* 2. *and Supp. Bew. Brit. Birds,* 2. 390. *Lath. Gen. Hist.* x. 429.

Young.—Le petit Fou brun. *Buff. Hist. Nat. Ois.* 8. 374.

Fou brun de Cayenne. *Buff. Pl. Enl.* 974.

About two feet in length: in the winter plumage the head, throat, neck, back, and all the under parts are a dull greenish-black: on the neck are a few very small whitish streaks: the feathers on the top of the back and of the wings are deep ash in their middle, edged with a broad band of deep black: the naked space round the eyes and the guttural pouch are reddish-yellow: the beak is reddish-ash, but black above: the irides are reddish-brown: the legs black. In the summer the occiput and nape are adorned with long deep green glossed feathers, which form a kind of crest: the throat is black: on the top of the

head, part of the neck, and on the thighs appear several pure white feathers, which are very long, slender, and silky: the rest of the plumage resembles that of the winter. The young have the throat of a clear ash: the head, neck, and under parts of a deep brown, with the feathers on the breast and fore part of the neck edged with ashy-brown: the feathers on the top of the back and of the wings are ashy-brown; all edged by a deep band of grey-brown: the rump, vent, wing and tail-feathers are blackish brown: the irides are brown.

This bird is said to inhabit the northern and southern countries of the two worlds, and to be very abundant in the regions of the arctic and antarctic circles: it is common on the coasts of Britain: the female builds her nest in the clefts of rocks, or on trees, and lays two or three whitish eggs. Their food consists of fishes.

CRESTED CORMORANT.

(Phalacrocorax cristatus.)

PH. *corpore viridinitente, subtus obscuro, rostro pedibusque obscuris, capite cristato.*

Cormorant with the body glossy green, beneath obscure, the beak and legs obscure, the head crested.

Pelecanus cristatus. *Fabr. Faun. Græn. no.* 58. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 1. 888.

Cormoran largup. *Temm. man. d'Orn.* 2 *Edit.* ii. 900.

Crested Shag. *Penn. Arct. Zool.* 2. 585. *A. Penn. Brit. Zool.* 2. 292. *pl.* 102. *Lath. Gen. Syn.* 6. 600. *Mont. Orn. Dict.* 2. *and Supp. Lath. Gen. Hist.* x. 423.

This species, which Montagu considers the young of the preceding, is described in various stages of growth and age by Temminck, thereby apparently showing that it must be distinct from the former. The winter dress of the old birds is said to be as follows: the beak is brown: legs black: irides green: all the plumage is of a beautiful resplendent glossy green: the top of the back, scapulars, wing-coverts, and wing quills are prettily bronzed, each feather being enriched with a straight band of velvety black: the tip of the wings does not extend beyond the origin of the tail, which is short, rounded, and of a dull black: length of the bird about twenty-eight inches. The young of the first year are distinguished from all the other species by the long and slender beak, by their short tail, and by the broad glossy margins which adorn all the feathers of the back and shoulders: the several colours of the upper parts are brown slightly shaded with green, those of the under ash-coloured more or less pale. During the summer months the old birds possess a beautiful flowing crest, nearly two inches in length, of a dusky colour; and on the occiput are about ten or twelve long and slender feathers: in other respects they are similar in plumage to their winter dress.

This species inhabits the north of Europe, and is common about Holyhead, in the Hebrides, Orcades, Norway, and the coasts of Sweden. Its nourishment consists of small fishes: it lays its eggs, which are of a rough calcareous texture, and of a white colour, in a kind of nest on the ledges of rocks.

AFRICAN CORMORANT.

(Phalacrocorax Africanus.)

Ph. *fusco-niger subtus albo nigricanteque varius, gulâ albâ, tectricibus alarum cæruleo-griseis, margine apiceque nigris.*

Brown-black Cormorant beneath white varied with dusky, with the throat white, the wing-coverts blue-grey, the margins and tips black.

Pelecanus Africanus. *Gmel. Syst. Nat.* 1. 577. *Lath. Ind. Orn.* 2. 890.

African Shag. *Lath. Gen. Syn.* 6. 606. *Lath. Gen. Hist.* x. 422.

Length twenty inches: beak dirty yellowish-white; upper mandible brown-black: middle of the back and rump glossy black: scapulars and wing-coverts blue-grey, each feather margined and tipped with black; the three first greater quills pale brown, inclining to cinereous, the rest brown black: secondaries as long as the quills, dusky-black, edged with brown: chin white: fore part of the neck mottled dusky-white and black: belly the same, with a mixture of brown: tail, consisting of twelve feathers, wedge-shaped; the two middle feathers seven inches long, the outermost three inches and a half; the four middle ones and outer on each side pale brown, the others black: legs black. Inhabits Africa.

VIOLET CORMORANT.

(Phalacrocorax violaceus.)

Ph. *crista erectâ, corpore toto nigro violaceo-nitente.*

Cormorant with an erect crest, the body entirely black, glossed with violet.

Pelecanus violaceus. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 2. 888.

Pelecanus leucogaster. *Vieil.*?—Young.?

Violet Cormorant. *Penn. Arct. Zool.* 2. 584. *B. Lath. Gen. Syn.* 6. 600.

Violet Shag. *Lath. Gen. Hist.* x. 425.

But little is known of this bird, save the account in the Arctic Zoology, where it is described as being wholly black, glossed with violet; and to inhabit Kamtschatka and the islands adjoining.

RED-FACED CORMORANT.

(Phalacrocorax Urile.)

Ph. *viridi-nitens, gutture orbitisque albis, alis caudâque obscuris, pedibus nigris.*

Glossy-green Cormorant with the throat and orbits white, the wings and tail obscure, the legs black.

Pelecanus Urile. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 2. 888.

Red-faced Cormorant. *Penn. Arct. Zool.* 2. 584. *E.*

Red-faced Shag. *Lath. Gen. Syn.* 6. 601. *Lath. Gen. Hist.* x. 426.

Length two feet ten inches: base of the beak green, tip black: naked space round the eyes reddish: head and neck dark reddish-green: on the middle of the neck in front are a few slender white feathers, thinly interspersed amongst the others, and several of them nearly three inches in length: the quills are black: the back and wings are dusky glossy black; the back also glossed with green and varied with a few slender white feathers: the belly is entirely black: on each side of the rump is a patch of white feathers: tail consisting of twelve feathers: legs black.

Inhabits Kamtschatka, building its nest on the rocks and crags of the sea-coast: the female lays three or four ill-tasted greenish eggs. It flies well, and with rapidity, but rises with difficulty from the ground. It eats voraciously, feeding upon fish, which it swallows whole: after a meal it is very drowsy and not easily roused; and being also very stupid, it will allow itself to be netted without making the slightest resistance.

SPOTTED CORMORANT.

(Phalacrocorax punctatus.)

Ph. *cristatus niger, alis fusco-cinereis nigro punctatis, lateribus colli linea utrinque albâ.*

Crested black Cormorant with the wings ashy-brown spotted with black, the sides of the neck with a white line on each side.

Pelecanus punctatus. *Mus. Carls. fas.* 1. *pl.* 10. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 2. 889.

Pelecanus nævius. *Gmel. Syst. Nat.* 1. 575.

Spotted Shag. *Lath. Gen. Syn.* 6. 602. *pl.* 104. *Lath. Gen. Hist.* x. 427. *pl.* 182.

A SINGULAR species, thus described by Latham (who also figures it). "Size of the Shag (*Ph. Graculus*): length two feet or more: beak three inches long, of a pale bluish-lead colour; in some yellow; the tip hooked: round the eyes bare, and of a dusky red: the chin, throat, and fore part of the neck are nearly black; as are the forehead, hind part of the neck, and beginning of the beak: just over the forehead arise some long feathers, forming a pointed crest: and at the hind part of the head a second, not unlike the first, but rather longer, some of the feathers measuring an inch and a half: just over the eye begins a line of white, which passes down on each side of the neck quite to the wings, and growing broader as it proceeds downward: the middle of the back and the wings are of a brownish-ash colour, each feather tipped at the end with a round spot of black, largest on the wing-coverts, but nowhere

bigger than a small pea: quills not spotted: from the middle of the back to the end of the tail, and from between the legs to the vent, black, glossed with green: tail three inches in length, rounded at the end; that and the quills plain black: legs deep brown, or black." He adds, "In some specimens the beak is reddish, and the legs dull yellow: the chin white, covered with feathers, and destitute of crest: the feathers of the sides near the vent streaked with white: thighs black: the stripe on each side of the neck not so distinct; and the black on the neck less pure. I have likewise observed one with the white on the sides of the neck not passing above half the length of it." Inhabits New Zealand, and builds amongst the rocks.

MAGELLANIC CORMORANT.

(Phalacrocorax Magellanicus.)

Ph. *niger maculâ pone oculos abdomineque albis, hypochondriis albo striatis.*

Black Cormorant with a spot behind the eyes and the abdomen white, the flanks striped with white.

Pelecanus Magellanicus. *Gmel. Syst. Nat.* 1. 576. *Lath. Ind. Orn.* 2. 889.

Magellanic Shag. *Lath. Gen. Syn.* 6. 604. *Lath. Gen. Hist.* x. 430.

The Magellanic Cormorant is thirty inches in length: its beak is black: the sides of the head and

the chin are naked and reddish: the head and neck, as far as the breast, the back, wings, and tail are deep black; the two former somewhat glossy: behind each eye is a white spot: the under parts of the body from the breast are also white: the sides are striped with white: the thighs are black: the quills and tail deep black: the last wedge-shaped, and four inches in length: the legs pale brown.

Inhabits Terra del Fuego and other southern countries, particularly Christmas Sound, where they breed by hundreds: they are very tame, from their haunts being seldom visited by mankind; and are so little alarmed at the report of a gun, that on being fired at, though they were at first disturbed, they immediately returned to the nest: they fly very heavily.

JAVAN CORMORANT.

(Phalacrocorax Javanicus.)

Ph. *corpore nigro, capite lævi.*
Cormorant with the body black, the head smooth.
Carbo Javanicus. *Horsfield, Linn. Trans.* xiii. *p.* 197.
Javan Cormorant. *Lath. Gen. Hist.* x. 419.

Length sixteen inches: beak blackish; under mandible pale: body and wings black, with a hoary silvery gloss, and the feathers margined with black: chin white: neck beneath variegated with black, brown, and fuliginous: thighs black: belly marked

with narrow cinereous bands. Inhabits Java: called Pechuck.

BROWN-NECKED CORMORANT.

(Phalacrocorax fuscicollis.)

Ph. *capite cristato, corpore nigro nitente, lateribus colli rufo-fuscis.*

Cormorant with the head crested, the body of a glossy black, the sides of the neck red-brown.

Brown-necked Shag. *Lath. Gen. Hist.* x. 425.

A SPECIES described by Dr. Latham in the new edition of his Synopsis, or General History of Birds; he says—"This is in shape much like the Shag: length twenty-one inches and a half: beak nearly three inches, cinereous, the under mandible naked to the base: orbits naked, brown: irides very dark: front and lore black, marked with white irregular spots: the feathers of the front erect, and form a kind of short crest: crown and upper part of the neck black, mixed with brown: sides of the neck rufous-brown: the rest of the plumage black, with a degree of gloss: scapulars and upper wing-coverts sharp-pointed: tail five inches and a half, rounded at the end, and consisting of twelve feathers, and the wings reach to the beginning of it: legs black. Inhabits Bengal, where it is not uncommon: is there called Pan Cowee: by the Mussulmen, Poukoul: is seen swimming all the day on the water, and roosts at night on the trees."

PIED CORMORANT.

(Phalacrocorax varius.)

Ph. *fuscus subtus albus, superciliis pallidis, dorso postico uropygio femoribus remigibus caudâque nigris.*

Brown Cormorant beneath white, with the eyebrows pale, the back behind, rump, thighs, quills, and tail black.

Pelecanus varius. *Gmel. Syst. Nat.* 1. 576. *Lath. Ind. Orn.* 2. 890.

Red Shag. *Lath. Gen. Syn.* 6. 605. *Lath. Gen. Hist.* x. 428.

Thirty inches in length: beak dusky at the tip; the rest of it, and the naked space about the eyes yellow: the top of the head, hind part of the neck, back, wings, and tail are brown; the middle of the back and wing-coverts palest, and the edges of the last very pale: the lower part of the back, rump, and thigh black-brown: the quills black; some of these nearest the body with pale tips: over the eyes is a narrow pale stripe: all the under parts of the body are pure white: the tail is rounded, about six inches in length, and brown-black: the legs are flesh-colour: claws dusky.

Inhabits New Zealand: said to build in trees, laying two or three pale bluish-white eggs.

NEW HOLLAND CORMORANT.

(Phalacrocorax Novæ Hollandiæ.)

Ph. *corpore nigro subtus variegato, pennis tectricibus alarum pallide marginatis, illis colli rufo marginatis, orbitis flavis.*

Cormorant with the body black, variegated beneath, the feathers of the wing-coverts with pale edges, and of the neck with rufous margins, orbits yellow.

New Holland Shag. *Lath. Gen. Hist.* x. 431.

"Length twenty inches: beak two inches and a half long, and pale: round the eye bare and pale yellow: plumage on the upper part in general black: the feathers on the wing-coverts have pale edges, and those of the neck fringed with rufous: under parts paler and mottled: tail six inches long, composed of twelve feathers, cuneiform: legs black. Inhabits New Holland."—*Latham.*

BLACK AND WHITE CORMORANT.

(Phalacrocorax melanoleucos.)

Ph. *corpore suprà nigro, subtus superciliisque albis, rostro carneo, pedibus nigris.*

Cormorant with the body above black, beneath and eyebrows white, the beak flesh-colour, the legs black.

Pelecanus melanoleucos. *Vieil. Nouv. Dict. d'Hist. Nat. tom.* 8. *p.* 88.

This species also inhabits New Holland: it has the upper part of the head, the neck, the body, the wings, and the tail black: the eyebrows, the cheeks, the throat, and all the under parts of a beautiful white. It is rather less than a Wild Goose.

CARUNCULATED CORMORANT?

(Phalacrocorax? carunculatus.)

Ph? *niger subtus albus, facie nudâ carunculatâ rubro, orbitis elevatis cæruleis, fasciâ alarum albâ.*

Black Cormorant? beneath white, with the face naked, carunculated and red, the orbits elevated and blue, the wings with a white band.

Pelecanus carunculatus. *Gmel. Syst. Nat.* 1. 576. *Lath. Ind. Orn.* 2. 889.

Carunculated Shag. *Lath. Gen. Syn.* 6. 603. *Lath. Gen. Hist.* x. 429.

About two feet in length: beak dusky: sides of the head naked: between the beak and eye carunculated and red; the rest of the space ash-colour: the orbits blue, and elevated: above the eye is a single large tubercle: irides dirty brown: the crown of the head, its sides, the hind part of the neck, and all the upper parts of the plumage are black, a patch of white on the wing-coverts excepted: the forehead, chin, and all the under parts are white: the legs are flesh-colour.

Inhabits various countries situated near the antarctic circle; and is particularly abundant in Staaten

Land, where they breed in large flocks, on the edges of the cliffs.

TUFTED CORMORANT?

(Phalacrocorax? cirrhatus.)

PH? *niger subtus albus, vertice cristato, liturâ alarum albâ, rostro orbitis pedibusque flavis.*

Black Cormorant? beneath white, with the vertex crested, a white mark on the wings, the beak, orbits, and legs yellow.

Pelecanus cirrhatus. *Gmel. Syst. Nat.* 1. 576. *Lath. Ind. Orn.* 2. 890.

Tufted Shag. *Lath. Gen. Syn.* 6. 606. *Lath. Gen. Hist.* x. 431.

INHABITS New Zealand: length nearly three feet: beak dusky yellow: naked space round the eye the same: the head, the hind part of the neck, and all the upper parts of the body, wings, and tail black: the feathers on the occiput very long, forming a kind of crest: on the wing-coverts is an oblong white patch, and all the under parts of the plumage are white: the tail is rounded and composed of fourteen feathers: the legs are pale yellowish-brown.

This bird appears to have great affinity to (if not a variety by age of) the Carunculated Cormorant.

CHINESE CORMORANT.

(Phalacrocorax Sinensis.)

Ph. *fuscus, gulâ albâ, corpore subtus albido maculis fuscis.*
Brown Cormorant with the throat white, the body beneath whitish with brown spots.
Pelecanus Sinensis. *Lath. Ind. Orn. Sup.* lxx.
Chinese Cormorant. *Lath. Syn. Sup.* ii. 364.
Leu-tze. *Staunt. Emb. Chin.* ii. 388. 412. *pl.* 72.
Chinese Shag. *Lath. Gen. Hist.* x. 423.

Figured and described by Sir George Staunton in his account of the Embassy to China. It is less than the Cormorant: the beak is yellow: irides blue: the prevailing colour of the plumage brownish-black: the chin white: the body whitish beneath, spotted with brown: tail rounded, consisting of twelve feathers.

Abundant in China, where it is trained by the inhabitants to catch fish for their use. Sir G. Staunton says, in the journey to *Han-choo-foo*, on the river *Luen*, he observed, on a large lake close to the canal, and to the eastward of it, thousands of small boats and rafts, built entirely for this kind of fishing: on each boat or raft were ten or twelve birds, which at a signal from the owner plunge into the water, and it was astonishing to see the enormous size of the fish with which they return grasped in their beaks. They appeared to be so well trained that it did not require either ring or cord about their throats to prevent them from swallowing any portion of their prey, except what the master was pleased to return to them for encouragement or food.

DWARF CORMORANT.

(Phalacrocorax pygmæus.)

Ph. *ater, pectore virescente, orbitis atomis albis sparsis, tectricibus alarum medio fuscis, collo pectore lateribusque punctis sparsis niveis.*

Dark Cormorant with the breast greenish, the orbits sprinkled with white spots, the middle of the wing-coverts brown, the neck, breast, and sides sprinkled with snow-white spots.

Pelecanus pygmæus. *Pall. reise.* 2. 712. *pl. G. Gmel. Syst. Nat.* 1. 574. *Lath. Ind. Orn.* 2. 890.

Le Cormoran pigmé. *Temm. man. d'Orn.* 591. *Id.* 2 *Edit.* ii. 901.

Dwarf Shag. *Lath. Gen. Syn.* 6. 607. *Lath. Gen. Hist.* x. 431.

Pelecanus pygmæus. β. *Lath. Ind. Orn.* 2. 890.

Length eighteen inches: the beak is brown varied with yellowish: space round the eyes and small guttural sac yellowish: all the plumage is glossy black and green: the feathers on the top of the back and of the wings are edged with a very brilliant black border: the legs are blackish brown. The young have the top of the head and all the nape of a blackish-brown: the throat white: the fore part of the neck clear brown, varied with whitish: the middle of the belly and the vent are whitish-yellow: the sides and thighs are brown: the feathers on the top of the back and of the wings are ashy-brown, all terminated by a large spot of brilliant glossy black: the quills and

tail-feathers are blackish-brown, and all tipped with clear brown: legs brown.

Native of the eastern countries of Europe, as far as Hungary: also of the vicinity of the Caspian Sea; and, according to Temminck, of America.

SULA. GANNET.

Generic Character.

Rostrum robustum, longum, rectum, basi validum, apice compresso subcurvato, acuto; mandibulæ marginibus serratis.

Facies gulaque nudæ.

Nares basales, lineares, absconditæ, in sulco longitudinale positæ.

Pedes robusti, breves; *tibiæ* basi nudæ; *unguis* medius internè denticulatus.

Beak robust, long, straight, strong at the base, its tip compressed, slightly curved, acute; the mandibles with their edges serrated.

Face and *throat* naked.

Nostrils basal, linear, hidden, placed in a longitudinal groove.

Legs robust, short; the *tibiæ* naked at the base; the middle *claw* internally denticulated.

SULA. Ray, Briss., Cuv., Temm.
PELECANUS. Linn., Gmel., Lath.
MORUS. Vieil.
DYSPORUS. Illig.
ANSER. Ray.

THE Gannets have the beak straight, slightly compressed and acute, the tip a little arched; the edges serrated, the teeth being directed backwards; the nostrils are prolonged in a groove, which runs

nearly to the tip: the throat is naked, as well as the orbits: the claw of the middle toe is denticulated: their wings are long. They swim with facility, though rarely, but do not dive; they are almost perpetually on the wing, and bathe themselves while flying, in the waves of the ocean; their nourishment consists chiefly of such fish as swim near the surface of the water: they nidificate in large flocks on the plane ledges of rocks, &c. laying generally two or three eggs. These birds have been called Boobies by our sailors, and Fous by the French, on account of their alleged stupidity in allowing themselves to be knocked down without attempting to move; and also for allowing the Frigate and other birds to compel them to disgorge their prey.

SOLAND GANNET.

(Sula bassana.)

Su. *corpore albo, facie cæruleâ, remigibus primoribus nigris.*

Gannet with the body white, the face blue, and the primary quills black.

Pelecanus bassanus. *Linn. Syst. Nat.* 1. 217. *Gmel. Syst. Nat.* 1. 577. *Lath. Ind. Orn.* 2. 891.

Anser bassanus. *Raii Syn.* 122. *A.*

Sula Hoieri. *Raii Syn.* 123.

Sula bassana. *Briss. Orn.* 6. 503. *pl.* 44.

Fou de bassan. *Buff. Hist. Nat. Ois.* 8. 376. *Buff. Pl. Enl.* 271. *Cuv. Reg. Anim.* 1. 526. *Temm. man. d'Orn.* 593. *Id.* 2 *Edit.* ii. 905.

Soland Goose, or Gannet. *Alb. Birds,* 1. *pl.* 86. *Penn. Brit. Zool.* 2. 293. *pl.* 103. *Penn. Arct. Zool.* 2. 510. *Lath. Gen.*



SOLAND GANNET.

Syn. 6. 608. *Lew. Brit. Birds,* 6. *pl.* 265. *Walc. Syn.* 1. *pl.* 94. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 393. *Mont. Wernerian Trans.* i. 176. *Bingl. Anim. Biog.* ii. 358. *Wood's Zoograph.* 1. *p.* 561. *Lath. Gen. Hist.* x. 433.

Young.—Sula major. *Briss. Orn.* 6. 697.
Grand Fou. *Buff. Hist. Nat. Ois.* 8. 372.
Great Booby. *Lath. Gen. Syn.* 6. 610. *A.*
Pelecanus maculatus. *Gmel. Syst. Nat.* 1. 579.
Fou tacheté. *Buff. Hist. Nat. Ois.* 8. 375. *Buff. Pl. Enl.* 986.
Spotted Booby. *Lath. Gen. Syn.* 6. 614.

Length about two feet nine inches: the beak is ashy-blue at its base, but white at its tip: the naked membrane which surrounds the eyes is bright bluish; the membrane which forms the prolongation of the opening of the beak, and that which extends to the middle of the throat, are bluish-black: the irides are yellow: the top of the head and the occiput are of a bright yellow ochre: the rest of the plumage is milk white, except the quills and bastard wings, which are black: the upper part of the toes and fore part of the tarsi are clear green; the membranes are dusky; claws white: the tail conical in form. The female is somewhat less in size, but resembles the male in colour. The young, immediately upon leaving the eggs, are clothed with a shining white down: during the first year all the plumage of the upper parts is of a uniform blackish-brown; of the under parts brown, varied with ash-colour: the beak, naked space of the head, and irides brown: the tail is rounded. After the second moult, or the age of one year, the head, the neck, and breast, are of an ashy-brown, thickly covered with small lance-shaped white spots; the feathers of

the back, the rump, and the wings, are also ashy-brown, with lance-shaped white spots, but larger and more distant than those of the neck and breast: the under parts of the plumage are whitish, varied with ashy-brown: the tail and quills are brown, the former conical, with white shafts: the beak is ashy-brown: the irides are yellow: the fore part of the tarsi and the upper part of the toes are brown-green: the membranes are ashy-brown: the claws brown. At the age of two years, and during the period of moulting, the plumage is either varied with large patches of white, on a brown ground, or of brown on a white ground: in the third year the plumage is perfected.

This species is abundant in the northern regions of Europe, Asia, and America, and particularly so in the Hebrides, the north of Scotland, and in Norway: it also occurs in more temperate climates, specimens having frequently been captured on the banks of the Thames. A few years back a very fine one was shot on the Medway by S. Henslow, Esq. who communicated it to me. Montagu says that it is frequently observed in the English Channel during the winter, and continues as late as the month of April.

The food of these birds consists chiefly of marine fish, of which the herring and pilchards are their favourites: they take their prey by darting down upon it with great velocity from a considerable height. The female lays one egg, which is nearly the size of that of a Goose, and equally pointed at each end; it is of a pure white, and its surface is rugged. The

inhabitants of the islands where these birds breed derive considerable emolument from the produce of their eggs, to obtain which they undergo the most fearful risks. Where it is possible, they climb up the rocks where they are laid, and in doing this, they pass along paths so narrow and difficult, as, in appearance, to allow them barely room to cling, and that too at a prodigious height over a raging sea. Where this cannot be done, they are lowered by a rope from the top, and unterrified, ransack all the nests within their reach, and then, by means of a pole and rope, move off to other places to do the same.

An interesting account of the anatomical structure of this bird is given by Montagu in the Wernerian Transactions, above quoted.

WHITE GANNET.

(Sula candida.)

Su. *corpore albo, facie rubrâ, remigibus omnibus nigris.*
Gannet with the body white, the face red, and the quills black.
Pelecanus piscator. *Linn. Syst. Nat.* 1. 217. *Gmel. Syst. Nat.* 1. 578. *Lath. Ind. Orn.* 2. 892.
Sula candida. *Briss. Orn.* 6. 501.
Le Fou blanc. *Buff. Hist. Nat. Ois.* 8. 371.
Lesser Gannet. *Lath. Gen. Syn.* 6. 611. *Lath. Gen. Hist.* x. 437.

Length two feet seven inches: beak serrated on its edges and reddish: naked space round the eyes

reddish, and on the throat dusky black; the prevailing colour of the plumage is white, except the greater quills and wing-coverts, which are black: the scapulars are also black at the tips: the tail is wedge-shaped, and consists of fourteen feathers; their base is white, and the rest of their length black: the legs are red: the central claw is broad and serrated.

Inhabits China and New Holland.

BOOBY GANNET.

(Sula Australis.)

Su. *corpore albido, facie rubrâ, remigibus primoribus apice nigricantibus.*

Gannet with the body whitish, the face red, and the primary quills dusky at the tip.

Pelecanus Sula. *Linn. Syst. Nat.* 1. 218. *Gmel. Syst. Nat.* 1. 578. *Briss. Orn.* 6. 495. *Lath. Ind. Orn.* 2. 892.

Anser bassano congener. *Raii Syn.* 191.

Fou commun. *Buff. Hist. Nat. Ois.* 8. 368. *pl.* 29.

Booby. *Catesb. Carol.* 1. *pl.* 87. *Lath. Gen. Syn.* 6. 612. *Lath. Gen. Hist.* x. 439.

Length two feet six inches: the beak nearly four inches and a half long, denticulated on its edges; it is grey, with a pale brown base: naked space round the eyes, and on the chin of a yellowish colour: irides pale grey: the head, neck, upper parts of the body, wings, and tail ashy-brown; the greater quills darkest: the tip of the tail brownish: the breast, belly, thighs, and vent white: the legs pale yellow: the claws grey.

The young have the head and neck white, slightly tinged with brown.

Common on the coasts of the warmer parts of America, particularly in the Bahama Islands, and off the Brasilian coast. They are described as being very silly stupid birds, from thence their name: they build their nests on the ground occasionally, but prefer constructing them on trees: their flesh is very dark-coloured, rank, and disagreeable, though frequently eaten by mariners.

BROWN GANNET.

(Sula Fiber.)

Su. *corpore fuscescente, facie rubra, remigibus omnibus nigricantibus.*

Gannet with the body brownish, the face red, and all the quills dusky.

Pelecanus Fiber. *Linn. Syst. Nat.* 1. 218. *Gmel. Syst. Nat.* 1. 579. *Lath. Ind. Orn.* 2. 893.

Sula fusca. *Briss. Orn.* 6. 499. *pl.* 43. *f.* 1.

Anser bassano congener cinereo-albus. *Raii Syn.* 191.

Brown Booby. *Lath. Gen. Syn.* 6. 613. *Lath. Gen. Hist.* x. 441.

Length rather more than two feet: beak three inches and three quarters long, reddish; and slightly serrated on the edges: naked space round the eyes red: the prevailing colour of the plumage is pale ashy-brown, with the back and scapulars darkest, and the under parts palest: the greater quills are

dusky-ash colour: the rump and tail-coverts are pale grey: the tail is wedge-shaped, and consists of fourteen feathers, of which the two middle ones are ash-colour, and the rest brownish-ash, with grey tips: the legs are red. Inhabits Cayenne, the West India Islands, and the western coast of tropical Africa.

BROWN AND WHITE BOOBY.

(Sula leucophea.)

Su. *alba, vertice nuchâque fuscis, dorsi medio alis rectricibusque duabus intermediis fusco-nigris.*

White Gannet with the vertex and nape brown, the middle of the back, the wings, and two middle tail-feathers brown-black.

Brown and White Booby. *Lath. Gen. Hist.* x. 441.

Supposed to inhabit Cayenne: its beak is brown: head, neck, and beginning of the back, the rump, breast, and all beneath, pure white: top of the head and nape pale brown: middle of the back, wings, and two middle tail-feathers dusky-brown, nearly black: some of the secondaries margined with white: tail long, cuneiform: the outer feathers white: legs pale yellow-brown.

LESSER GANNET?

(Sula? parva.)

Su.? *niger subtus albus, facie plumosâ.*
Black Gannet? beneath white, the face plumose.
Pelecanus parvus. *Gmel. Syst. Nat.* 1. 575. *Lath. Ind. Orn.* 2. 893.
Le petit Fou de Cayenne. *Buff. Hist. Nat. Ois.* 6. 374. *Buff. Pl. Enl.* 973.
Lesser Booby. *Lath. Gen. Syn.* 6. 614. *Lath. Gen. Hist.* x. 442.

This is a very small species, being only eighteen inches in length: its beak is nearly straight: the space round the eye is not bare: the throat, breast, and belly are white: all the remainder of the plumage dusky black. Probably a young bird. Inhabits Cayenne.

PELECANUS. PELICAN.

Generic Character.

Rostrum capite longius, longum, rectum, latus, valdè depressum; mandibulâ superiore latâ, canaliculatâ, apice adunco et unguiculato, inferiore bifurcâ, bursâ membranaceâ, flaccidâ, valdè distensili ornatâ.

Facies gulaque nudæ.

Nares basales, in rimâ longitudinalæ sitæ.

Pedes validi, breves; *tibiæ* basi nudæ; *unguis* margine internâ simplex.

Beak longer than the head, long, straight, broad, much depressed; the upper mandible broad, channelled, the tip bent down and unguiculated; the lower bifuscate, furnished with a flaccid, dilatable sac.

Face and *throat* naked.

Nostrils basal, placed in a longitudinal cleft.

Legs strong, short; the *tibiæ* naked at the base; the middle *claw* with its inner edge entire.

PELECANUS. Linn., Gmel., Lath., Temm., Vieil.
ONOCROTALUS. Ray, Briss.

THE birds of this genus are remarkable for the enormous pouch or bag with which the under mandible of the beak is furnished: the beak is also remarkable for its great length, width, and breadth,



COMMON PELICAN.

from the hook at its extremity, and from the nasal grooves, which extend the entire length of the beak, and conceal the nostrils. The orbits and throat are naked: the tail rounded.

Pelicans are usually large birds, and like their congeners subsist on fishes, and are excessively voracious: they are excellent swimmers, but are incapable of diving: they reside on the banks of rivers and lakes, and occasionally on the sea-coasts.

COMMON PELICAN.

(Pelecanus Onocrotalus.)

Pe. *incarnato-albus, alulis remigibusque primoribus nigris, gulâ sacco rufo.*

Reddish-white Pelican with the bastard wing and primary quills black, the throat with a red sac.

Pelecanus Onocrotalus. *Linn. Syst. Nat.* 1. 215. *Gmel. Syst. Nat.* 6. 569. *Raii Syn.* 121. *Lath. Ind. Orn.* 2. 882.

Onocrotalus Pelecanus. *Briss. Orn.* 6. 519. 1.

Pelican. *Buff. Ois.* 8. 282. *pl.* 25. *Buff. Pl. Enl.* 87. *Cuv. Reg. Anim.* 1. 523.

Pelican blanc. *Temm. man. d'Orn.* 584. *Id.* 2 *Edit.* ii. 891.

White Pelican. *Edw. Glean. pl.* 93. *Penn. Arct. Zool.* 2. 505. *Lath. Gen. Syn.* 6 575. *Lath. Gen. Hist.* x. 397.

Variety?—Pelecanus Philippensis. *Gmel. Syst. Nat.* 1. 571. *Lath. Ind. Orn.* 2. 883.

Pelecanus roseus. *Gmel. Syst. Nat.* 1. 570. *Lath. Ind. Orn.* 2. 883.

Onocrotalus Philippensis. *Briss. Orn.* 6. 527. *pl.* 46.

Pelican rose de l'Isle de Luçon. *Sonner. Voy. Ind.* 91. *pl.* 53. *Buff. Pl. Enl.* 965.

Philippine Pelican. *Lath. Gen. Syn.* 6. 583. *Lath. Gen. Hist.* x. 402.

Rose-coloured Pelican. *Lath. Gen. Syn.* 6. 579. *Lath. Gen. Hist.* x. 401.

Variety? 2.—Pelecanus Manillensis. *Gmel. Syst. Nat.* 1. 571. *Lath. Ind. Orn.* 2. 883.

Le Pelecan brun de l'Isle de Luçon. *Sonner. Voy. Ind.* 71. *pl.* 53.

Manilla Pelican. *Lath. Gen. Syn.* 6. 583. *Lath. Gen. Hist.* x. 401.

This is a very large species, measuring nearly six feet in length, and expanding about fifteen feet: its beak is nearly sixteen inches long; its upper mandible is flat and broad, furnished with a hook at the end; the skin between the sides of the upper mandible is very flaccid and dilatable, reaching eight or nine inches down the neck, and naked: the gape is very wide; on the top of the under mandible runs a crimson rib; the rest of it is pale red at the base, and yellowish towards the point; the under one is pale red, and the pouch is red or yellowish: the tongue is very small: the irides are hazel: the sides of the head are naked and flesh-coloured: the occiput is slightly crested: the entire plumage is white, slightly tinged with flesh-colour, the spurious wings and primary quills, which are black, excepted: the legs are flesh-colour: claws grey. The young have the beak and naked parts round the eyes livid: the irides brown: the prevailing colour of the plumage ashy-white: the belly whitish: the wings and back of a very deep ash: all the feathers edged with brighter ash: the quills are blackish-ash.

Found throughout the greater portion of the an-

cient world, especially between the tropics and the lower temperate climates: it is common in the eastern countries of Europe, on the banks of the rivers and lakes of Hungary and Russia, and extremely so on the Danube; but it seldom visits the sea-coasts, except the inland ones of the Caspian and Euxine Seas. Also found at the Cape of Good Hope.

The female constructs a nest of reedy grass, among moss or turfs; it is a foot and a half in diameter, much hollowed, and filled with soft grass: she lays two or more white eggs, similar to those of the Swan. It is said that if any person attempts to disturb them while the female is sitting, she will take the eggs out of the nest with her beak, and drop them into the water, returning them to their place as soon as quiet is restored. The principal food of these birds consists of fish, which they prefer in a living state, and catch with great dexterity.

The bag in the lower mandible of the beak of this bird is one of the most remarkable appendages that is found in the structure of any animal. Though it wrinkles up nearly into the hollow of the chap, and the sides, to which it is attached, are not (in a quiescent state) above an inch asunder, it may be extended to an amazing capacity; and when the bird has fished with success, its size is almost incredible: it will contain a man's head with the greatest ease. In fishing the Pelican fills this bag, and does not immediately swallow his prey; but, when this is full, he returns to the shore to devour at leisure the fruits of his industry. He is not long in digesting his food; for he has generally to fish more than once in the

course of a day. When incited to exertion by hunger the Pelicans fly from their resting-place, and raising themselves thirty or forty feet above the surface of the sea, turn their head with one eye downwards, and continue to fly in that position till they see a fish sufficiently near the surface. They then dart down with astonishing swiftness, seize it with unerring certainty, and store it up in their pouch. Having done this they rise again, and continue the same actions till they have procured a competent stock.

BROWN PELICAN.

(Pelecanus fuscus.)

Pe. *cinereo-fuscus, capite subcristatâ colloque albidis, remigibus primoribus nigris.*

Ashy-brown Pelican with a slightly crested whitish head and neck, the primary quills black.

Pelecanus fuscus (occidentalis). *Linn. Syst. Nat.* 1. 215. β. *Gmel. Syst. Nat.* 1. 570. *Lath. Ind. Orn.* 2. 883.

Onocrotalus fuscus. *Briss. Orn.* 6. 524. *Raii Syn.* 191.

Pelican brun. *Buff. Hist. Nat. Ois.* 8. 306. *Buff. Pl. Enl.* 957.

Brown Pelican. *Penn. Arct. Zool.* 2. 506. *Lath. Gen. Syn.* 6. 580. *Lath. Gen. Hist.* x. 405.

Nearly four feet in length: beak fifteen inches and a quarter long: greenish at the base, and inclining to a blue or bluish-red towards the tip: the pouch is of a bluish-ash colour, streaked with reddish: the irides are deep bluish-ash colour: the naked

skin round the eyes whitish: the head and neck are white: the former somewhat crested on the occiput: the back, scapulars, and rump are ashy-brown, the middle of each feather whitish: the breast and under parts are similar to the upper, but plain: the upper wing-coverts like the back, with some of the outer greater ones plain brown: the primaries are black; the secondaries hoary-brown: tail the same: legs lead-colour; claws black.

Common in most parts of America, especially in the West India Islands.

NEW HOLLAND PELICAN.

(Pelecanus Australis.)

Pe. *albus dorso supremo, remigibus caudâque nigris.*
White Pelican with the upper part of the back, the quills and tail black.
New Holland Pelican. *Lath. Gen. Hist.* x. 402.

Length five feet: beak and round the eye yellow: general colour of the plumage white: the beginning of the back, the quills and tail black: inner half of the lesser wing-coverts white: legs pale blue; webs dusky: the quills reach to about the middle of the tail. Inhabits New Holland.

RED-BACKED PELICAN.

(Pelecanus rufescens.)

Pe. *cristatus rufescens, capite colloque fuscescente-albis, caudâ saturate cinereâ.*

Crested reddish Pelican with the head and neck brownish-white, the tail dark ash.

Pelecanus rufescens. *Gmel. Syst. Nat.* 1. 571. *Lath. Ind. Orn.* 2. 884.

Red-backed Pelican. *Lath. Gen. Syn.* 6. 584. *Lath. Gen. Hist.* x. 404.

"Size of a large Swan: length five feet: beak thirteen inches long, and of a pale dirty yellow: space round the eyes and pouch the same; the last reaches eight inches down the neck: the hind head is crested; some of the feathers four inches in length: the head and neck dirty brownish-white: the back of a fine pale reddish cinnamon-colour: the wing-coverts like the neck, but darker: scapulars pale greyish lead-colour: lesser quills not unlike the wing-coverts, but the ends dark grey, and the shafts black: prime quills black: tail of a deep grey; the shafts white at the base, and black towards the ends: the belly, thighs, under wing-coverts, and vent, like the back, but much paler: the feathers of the breast, wing-coverts, and lower part of the neck, are long, narrow, and pointed, especially those of the breast: the legs are yellow." Dr. Latham has given the above description of this bird from a specimen in his own collection: he adds, "that it was captured on the Gold Coast of Africa,

where it was kept tame for a long time: it was very voracious, and an experiment was made to ascertain what quantity of fish it would take into its beak: it first attempted to take up one (amongst several which were placed before it) of ten pounds, but the beak was not strong enough to raise it from the ground: it then picked up as far as ten of the others, each weighing a pound, and stored them carefully in the bag, arranging them alongside each other, with the heads towards the throat: and after this trudged off very stately, with the bag hanging down to his feet."

CHARLESTOWN PELICAN.

(Pelecanus Carolinensis.)

Pe. *supra obscurus, subtus albus.*
Pelican above obscure, beneath white.
Pelecanus Carolinensis. *Gmel. Syst. Nat.* 1. 571. *Lath. Ind. Orn.* 2. 884.
Charlestown Pelican. *Penn. Arct. Zool.* 2. 507. *Lath. Gen. Syn.* 6. 585. *Lath. Gen. Hist.* x. 406.

Size of a Canada Goose; colour of the plumage dusky above; white on the breast and belly; with a pouch capable of holding several gallons of liquids. They abound in the bay of Charlestown, in America. Latham mentions the following varieties: "One in length four feet: beak thirteen inches long, and differing from other Pelicans in having that part of the upper mandible which is next the base almost

cylindrical, and not flat, though spreading out considerably near the end: their plumage brown above; head, neck, and under parts brownish-white: the lower half of the back, in one specimen, striped black end dusky-white; the feathers narrow, and edged with the last colour: in the other, the back of a plain colour: the bags in both of an enormous size, taking up the greatest part of the neck before: at the hind part of it, the whole length, the feathers much larger than the rest: though the nape of the neck, or back part of the head, were not at all crested. These two were brought from Cayenne." It also inhabits Georgia, in North America.

JAVAN PELICAN.

(Pelecanus Javanicus.)

Pe. *albus, cristâ obsoletâ, remigibus primoribus nigris, secundariis et plumis dorsalibus nigro marginatis, rachidibus pennarum albis, rostro latiore.*

White Pelican with an obsolete crest, the primary quills black, the secondaries and dorsal feathers margined with black, the shafts white, the beak broad.

Pelecanus Javanicus. *Horsfield, Linn. Trans.* xiii. 197.

Javan Pelican. *Lath. Gen. Hist.* x. 403.

Four feet in length: plumage white, with an obsolete crest; and a broad beak: the prime quills black, the secondaries and feathers of the back margined with black, with the shafts white. Inhabits Java: called Bakklu.

SAW-BILLED PELICAN.

(Pelecanus Thagus.)

Pe. *caudâ rotundatâ, rostro serrato.*
Pelican with a rounded tail and serrated beak.
Pelecanus Thagus. *Gmel. Syst. Nat.* 1. 577. *Lath. Ind. Orn.* 2. 884.
Onocrotalus rostro denticulato. *Briss. Orn.* 6. 527. *A.*
Onocrotalus Mexicanus dentalus, Alcatraz. *Raii Syn.* 127.
Saw-billed Pelican. *Lath. Gen. Syn.* 6. 579. *Lath. Gen. Hist.* x. 409.

This bird differs from the Common Pelican merely in having the edges of the beak toothed, and the beak itself of a saffron colour: the legs are also saffron colour, inclining to red. Inhabits Mexico.

ROUGH-BILLED PELICAN?

(Pelecanus? trachyrhynchos.)

Pe? *cristatus albus, gulâ saccatâ nigro striatâ, rostro rugoso.*
Crested white Pelican? the gular sac striped with black, the beak rugose.
Pelecanus trachyrhynchos. *Lath. Ind. Orn.* 2. 884.
Pelecanus erythrorhynchos. *Gmel. Syst. Nat.* 1. 571.
Rough-billed Pelican. *Lath. Gen. Syn.* 6. 586. *Lath. Gen. Hist.* x. 408.

This curious species is thus commemorated by Dr. Latham, in his History:—"Size between a Goose

and a Swan: length four feet six inches: beak thirteen inches, shaped as in other Pelicans, with the addition of some singular protuberances on the top of the upper mandible, from the base of which, for about seven inches, the surface is plain; at this part an elevated ridge begins, about one inch and a half in height, and one-third of an inch in thickness; this continues about an inch and a half on the beak, and then other smaller ones take rise, of different sizes, and continue decreasing in size in an abrupt manner to the end of the beak: the colour of both reddish-yellow, here and there inclining to red; the under mandible and pouch as in other species, but on each side about the middle of the first, is a black spot, the size of a silver penny; and the bag is streaked with fine lines of black, which are pretty numerous on the fore part of it, most so next the end of the beak: the plumage is wholly of a pure white, except the bastard wings and quills, which are black: the shafts of the larger ones white; at the hind-head the feathers are greatly elongated, forming a crest of four inches and a half in length: the legs are black." Found in America.

FREGATTA. FRIGATE-BIRD.

Generic Character.

Rostrum capite longiùs, robustum, integrum, supra sulcatum; mandibulæ arcuatæ, apicibus acutis.	*Beak* longer than the head, robust, entire, sulcated above; the mandibles arcuated, their tips acute.
Orbites nudæ.	*Orbits* naked.
Alæ longissimæ.	*Wings* very long.
Cauda forficata.	*Tail* forked.
Pedes breves; *tibiæ* plumosæ; membranæ parvæ.	*Legs* short; *tibiæ* plumose; membranes small.

FREGATTA. Ray, Briss., Temm.
PELECANUS. Linn., Gmel., Lath.
TACHYPLETIS. Vieil.

SEVERAL remarkable peculiarities are observable in the structure of the Frigate-birds: in the first place they differ from the rest of the Natatores in having the toes so slightly webbed as to incapacitate them from swimming, the membrane scarcely reaching to the second joint of each toe; again, the immense extent of wing in comparison with the size of the bird is unparalleled in the birds of this order: they differ from the rest of the family by their forked

tail, very short legs, and by the peculiar form of the beak, both mandibles curving downwards. From the extraordinary length of wing with which they are endowed, they fly to a most surprising distance: instances are on record of individuals being observed at the distance of 1000 miles from land; they are always however observed within, or close to, the tropics: they feed chiefly upon the *flying-fish*: they attack the Boobies, and compel them to disgorge their prey, which they instantly devour. As before observed, there is an extraordinary affinity between these birds and the Falcons.

I have followed Ray in the appellation given to this genus, although his name is less classical than that of Vieillot, as his name has the right of priority, which ought always to be our guide.

COMMON FRIGATE-BIRD.

(Fregatta Aquilus.)

Fr. *corpore nigro, rostro rubro, orbitis nigris;* femina *capite abdomineque albis.*

Frigate bird with the body black, the beak red, the orbits black: *female* with the head and abdomen white.

Pelecanus Aquilus. *Linn. Syst. Nat.* 1. 216. *Gmel. Syst. Nat.* 1. 572. *Lath. Ind. Orn.* 2. 885. *Burton, Linn. Trans.* xiii. 1.

Pelecanus minor. *Gmel. Syst. Nat.* 1. 572. *Lath. Ind. Orn.* 2. 885.

Fregatta. *Briss. Orn.* 6. 506. *pl.* 43.

Fregatta minor. *Briss. Orn.* 6. 509.



COMMON FRIGATE-BIRD.

Fregatta avis. *Raii Syn.* 153. 192.
La Fregate. *Buff. Hist. Nat. Ois.* 8. 381. *Buff. Pl. Enl.* 961. *Cuv. Reg. Anim.* 1. 525.
Petite Fregate. *Buff. Hist. Nat. Ois.* 8. 390.
Man of War, or Frigate Bird. *Sloan. Journ.* 1. 30. *Alb. Birds,* 3. *pl.* 80. *Edw. Glean. pl.* 309.
Lesser Frigate Pelican. *Lath. Gen. Syn.* 6. 590. *Lath. Gen. Hist.* x. 412.
Frigate Pelican. *Lath. Gen. Syn.* 6. 587. *Wood's Zoogr.* 1. 557. *Lath. Gen. Hist.* x. 410.

The usual length of this bird is three feet, from the tip of the beak to that of the tail: the prevailing colour of the plumage of the male is black, glossed with green on the back; of the female dusky, with the abdomen and nearly the whole of the head white: the eye and parts immediately surrounding it are black: the beak is of a dirty yellowish white: the feet of the male are black; those of the female of a bluish-white: the male is also distinguished from the female by a large fleshy bag or sac placed under the throat, of a bright red colour, and in its flaccid state putting on a granulated appearance: when distended it is smooth, and enlarges to the size of a hen's egg.

A very interesting account of this singular bird is given by Mr. Burton in the thirteenth volume of the Linnean Transactions, to which, on account of its length and the limited space to which I find that my remarks are confined, I must refer my readers; stating, however, that it resides in abundance in the Island of Ascension, and is also found on many of the coasts of the islands and continents of the south: its food consists chiefly of fish, and generally of the *Exocetus volitans:* the female lays one egg of a white

colour, nearly resembling that of a hen, though somewhat larger; the male assists in incubation, while the female is employed in procuring food.

WHITE-HEADED FRIGATE-BIRD.

(Fregata leucocephalus.)

Fr. *corpore fusco, capite collo pectore abdomineque albis, rostro obscuro.*

Frigate-bird with the body brown, the head, neck, breast, and abdomen white, the beak obscure.

Pelecanus leucocephalus. *Gmel. Syst. Nat.* 1. 572. *Lath. Ind. Orn.* 2. 886.

La Fregate. *Buff. Hist. Nat. Ois.* 8. *pl.* 30.

White-headed Frigate Pelican. *Lath. Gen. Syn.* 6. 591. *Lath. Gen. Hist.* x. 413.

Length about three feet: beak five inches long, dusky, tip nearly white: sides of the head covered with feathers: head and fore part of the neck white, finishing in a point on the last: breast and belly white: the rest of the plumage brown: tail forked: legs pale reddish-brown.

Latham describes a variety which had the head and half the neck, all round, white, passing before down the breast, and ending between the legs: sides of the body, the vent, and rest of the plumage brown: legs reddish-brown. In the Hunterian Museum: whence unknown.

PALMERSTONE FRIGATE-BIRD.

(Fregata Palmerstonis.)

Fr. *corpore fusco viridi nitente subtus albo, jugulo albo nigroque vario, abdomine albo, crisso nigro.*

Frigate-bird with the body brown glossed with green, beneath white, the jugulum varied with black and white, the abdomen white, the vent black.

Pelecanus Palmerstonis. *Gmel. Syst. Nat.* 1. 573. *Lath. Ind. Orn.* 2. 886.

Palmerstone Frigate Pelican. *Lath. Gen. Syn.* 6. 592. *Lath. Gen. Hist.* x. 414.

Length three feet: beak black: space round the eyes feathered: the upper part of the head, neck, and body brown, glossed with greenish: wing-coverts nearest the body dark glossy green: fore part of the neck mottled with white and brown: the rest of the under parts white: vent black: tail forked, the shafts of the feathers white: the legs dusky black: the middle claw serrated in the inside. Inhabits Palmerstone Island, in the South Sea. Probably a variety or sex of the preceding.

PHAËTON. TROPIC-BIRD.

Generic Character.

Rostrum validum, capite longiùs, compressum, supra convexum, rectum, margine denticulato, apice adunco, acuto.
Nares oblongæ, perviæ.
Facies plumis tecta.
Cauda cuneiformis, rectricibus duabus intermediis longissimis.
Pedes breves; *tibiæ* basi nudæ.

Beak strong, longer than the head, compressed, above convex, straight, its edge denticulated, the tip bent down and acute.
Nostrils oblong, pervious.
Face clothed with feathers.
Tail wedge-shaped, the two intermediate tail-feathers very long.
Legs short; the base of the *tibiæ* naked.

PHAËTON. Linn., Gmel., Lath., Cuv., Temm., Vieill., &c.
LEPTURUS. Briss.
TROPICOPHILUS. Leach.

As their name implies, these birds are usually found within the tropics: in fact, it is a rare occurrence for them to be observed without that zone of the globe, and they are so constant that our mariners hail their appearance as a sure indication of their vicinity to the tropics; they seldom approach the land, except for the purpose of nidification, and, in

common with the rest of the Pelecanidæ, they perch upon trees: their food consists of fishes, upon which they pounce after the manner of the birds of the preceding genus. The structure of their beak is not much unlike that of some of the Gulls, and that forms a beautiful connecting link with those birds, as does also their thick and downy plumage: their feet are more webbed than those of the Frigate-birds; and the tail is adorned with two extremely long central feathers.

COMMON TROPIC-BIRD.

(Phaëton æthereus.)

Ph. *albus, dorso uropygio tectricibusque alarum minoribus nigro striatis, rectricum scapis basi fasciâque supra oculari nigris, rostro rubro.*

White Tropic-bird, with the back, rump, and lesser wing-coverts striped with black, the shafts at the base of the tail-feathers and fascia above the eyes black, the beak red.

Phaëton æthereus. *Linn. Syst. Nat.* 1. 219. *Gmel. Syst. Nat.* 1. 581. *Lath. Ind. Orn.* 2. 893. *Leach, Zool. Misc.* 2. 140.

Lepturus. *Briss. Orn.* 6. 480. *pl.* 42. *f.* 1.

Avis Tropicorum. *Raii Syn.* 123.

Grand Paille-en-queue. *Buff. Hist. Nat. Ois.* 8. 348. *pl.* 28. *Buff. Pl. Enl.* 998.

Tropic-bird. *Willou. Orn.* 331. *pl.* 75. *Lath. Gen. Syn.* 6. 615. *Lath. Gen. Hist.* x. 443.

Variety.—Lepturus candidus. *Briss. Orn.* 6. 485. *pl.* 42. *f.* 2.

Paille-en-queue de l'isle de l'Ascension. *Buff. Hist. Nat. Ois.* 8. 355. *Buff. Pl. Enl.* 369.

Tropic-bird. *Edw. Glean. pl.* 149. *f.* 2.

From the tip of the beak to that of the tail, this bird measures two feet ten inches: the beak is red: the head, neck, and under parts of the body are white: near the base of the upper mandible of the beak arises a streak of black, which curves round the upper part of the eye and ends a little way behind it: the back, rump, and scapulars are white, striped with black curved streaks: the lesser wing-coverts are white, some of them transversely marked with black: the greater quills are black with white edges: the sides of the body, over the thighs are black, or dusky, and white mixed: the tail is white, with the exception of the two middle feathers, which are black at the base; the last feathers are about twenty inches in length; the next two about five inches and a half, and the two outer feathers about half that length, producing a cuneiform shape: the legs are dusky yellow: claws black.

This species varies in having its beak cinereous at its base, the rest yellowish; the general colour of the plumage silvery white; with the crescent over the eye, and black markings on the scapulars: the legs yellowish: the base of the toes the same: the rest of their length, the webs, and claws black. Another variety is mentioned, differing in having the plumage of a yellowish white or cream colour, instead of being pure silvery white.

Inhabits various maritime countries within the tropics, but nowhere so abundant as at Palmerstone Island: they are said to perch on trees, and to lay their eggs on the ground beneath them: they fly very high, and stray to a very considerable distance

from land; they attack and prey upon the flying-fish.

The natives of Otaheite, and of other islands in the South Seas, search diligently after the long tail-feathers, which they use to ornament their dresses.

BLACK-BILLED TROPIC-BIRD.

(Phaëton melanorhynchos.)

Ph. *albo nigroque striatus subtus fronteque albus, tæniâ ante poneque oculos, rostro pedibusque nigris.*

Tropic-bird striped with white and black, beneath and the forehead white, with a broad band before and behind the eyes, the beak and legs black.

Phaëton melanorhynchus. *Gmel. Syst. Nat.* 1. 582. *Lath. Ind. Orn.* 2. 894.

Black-billed Tropic-bird. *Lath. Gen. Syn.* 6. 619. *Lath. Gen. Hist.* x. 446.

Young?—New Holland Tropic-bird. *Lath. Gen. Hist.* x. 448.

This is nineteen inches and a half in length: beak black: the plumage on the upper part of the body and wings irregularly streaked with black and white: before the eye a strip or crescent of black, and behind a streak of the same: the quills and tail are marked similarly to the upper parts of the plumage; the former has the tips white, and the latter has them dusky black: the forehead and all the under parts of the body are pure white: the sides over the thighs

are striated black and white: the legs are black. Inhabits Turtle and Palmerstone Islands, in the South Seas.

RED-TAILED TROPIC-BIRD.

(Phaëton phœnicurus.)

Ph. *roseo-incarnatus, rostro rectricibusque duabus intermediis rubris, tæniâ superciliari pedibusque nigris.*

Rosy flesh-coloured Tropic-bird, with the beak and two middle tail-feathers red, with a superciliary band and the legs black.

Phaëton phœnicurus. *Gmel. Syst. Nat.* 1. 583. *Lath. Ind. Orn.* 895.

Paille-en-queue à brins rouges. *Buff. Hist. Nat. Ois.* 8. 357.

Paille-en-queue de l'isle de France. *Buff. Pl. Enl.* 979.

Red-tailed Tropic-bird. *Lath. Gen. Syn.* 6. 619. *pl.* 105. *Lath. Gen. Hist.* x. 447.

Two feet ten inches in length, including the two middle tail-feathers, which alone measure twenty-one inches: the beak is deep red: the plumage cream-colour, delicately tinged with pale rose-colour: over the eyes a black crescent: scapulars tipped with black: the shafts and base of the two middle tail-feathers black; the rest of the webs bright red: the sides over the thighs dusky: the legs black.

Like its congeners this bird prefers the countries within the tropics: it occurs, however, in most plenty



Griffith

RED-TAILED TROPIC-BIRD.

in the island of Mauritius, where they construct their nests in hollows in the ground beneath the trees, laying two yellowish white eggs, spotted with rufous. It also occurs in plenty at Palmerstone and Turtle Islands, and among the Friendly and Society Islands in the South Seas.

PLOTUS. DARTER.

Generic Character.

Rostrum capite longior, rectum, validum, margine obliquè denticulato, apice acuto.	*Beak* longer than the head, straight, strong, its edge obliquely denticulated, its tip acute.
Nares in rimâ ad basin rostri positæ.	*Nostrils* placed in a cleft at the base of the beak.
Facies gulaque nudæ.	*Face* and *throat* naked.
Collum elongatum.	*Neck* elongated.
Pedes breves; *tibiæ* basi nudæ.	*Legs* short; the *tibiæ* naked at the base.

PLOTUS. Linn., Gmel., Lath., Cuv., Vieil., &c.

THESE birds have a body and legs in some degree resembling those of the Cormorants, but their neck is extremely long and slender, their head small, and their beak straight, slender, and pointed, with their edges denticulated; in other respects they agree with the rest of the birds of this family, as they do also in habits.



BLACK BELLIED DARTER.

BLACK-BELLIED DARTER.

(Plotus melanogaster.)

Pl. *abdomine nigro.*
Darter with the abdomen black.
Plotus melanogaster. *Gmel. Syst. Nat.* 1. 580. *Lath. Ind. Orn.* 2. 895.
Anhinga de Cayenne. *Buff. Pl. Enl.* 959.
Anhinga noir du Senegal. *Buff. Pl. Enl.* 960.
Anhinga. *Buff. Hist. Nat. Ois.* 8. *pl.* 35.
Anhinga roux du Senegal. *Buff. Hist. Nat. Ois.* 8. 453? *Buff. Pl. Enl.* 107.
Black-bellied Darter. *Lath. Gen. Syn.* 6. 624. *pl.* 106. *Wils. Amer. Orn.* v. ix. *p.* 79. *pl.* lxxiv. *f.* 1. 2. *Lath. Gen. Hist.* x. 451.

This appears to be a variable species: one described by Latham, from a specimen in the British Museum, measured "three feet three inches and a half in length: its beak four inches and a half; colour dusky yellow, covered at the base with a skin of the same colour, which occupies the space between the beak and eye, and surrounds the latter: nostrils a slit placed obliquely, not far from the base; the upper mandible finely serrated: the head is small, and the neck long and slender, both covered with short downy feathers, of a dusky white: or very pale brown, palest before, and darkest at the lower part behind: the back, scapulars, and wing-coverts are of the same colour, but deeper: the lower part of the neck, on the sides, and the wing-coverts, marked with oval spots of white, regular, and forming rows on

the latter: the scapulars streaked longitudinally with white, giving the bird an elegant appearance: across the lower part of the breast a dull rufous bar; from thence all beneath is black, of which colour are also the quills and tail; the last is eleven inches in length, a little rounded in shape, and the ends of the feathers rusty pale brown; the two middle feathers undulated cross-ways in a singular manner: the legs are clumsy, stout, and only four inches and a half in length; the colour dirty yellowish-brown." Native place unknown.

A variety from Cayenne is figured by Buffon; of the length of the former: beak pale yellow: round the eye and throat pale dusky white: the wing-coverts yellowish-white: the rest of the plumage black, except the feathers on the upper part of the back, and some of the scapulars, which are streaked down the middle with white; and the tip of the tail dirty rufous: legs brownish-yellow.

WHITE-BELLIED DARTER.

(Plotus Anhinga.)

Pl. *abdomine albo.*

Darter with the abdomen white.

Plotus Anhinga. *Linn. Syst. Nat.* 1. 218. *Gmel. Syst. Nat.* 1. 580. *Lath. Ind. Orn.* 2. 895.

Anhinga. *Briss. Orn.* 6. 476. *Raii Syn.* 124. *Buff. Hist. Nat. Ois.* 8. 448.

White-bellied Darter. *Lath. Gen. Syn.* 6. 622. *Lath. Gen. Hist.* x. 449.

About the size of a Duck in the body, but its length, from the tip of the beak to that of the tail, is about two feet ten inches: the beak is greyish with its base yellowish: the irides are gold-coloured: the head is small, and the neck long and slender, and covered with soft downy feathers of a rufous grey-colour: the throat and fore part of the neck are grey, the upper part of the back and scapulars are dusky black: the middle of the feathers dashed with white: the lower part of the back, the rump, and upper tail-coverts, of a fine black: the lesser and middle wing-coverts are similar to the back; the greater coverts nearest the body are black, spotted with white, the outer ones plain black: the tail consists of twelve broad glossy black feathers: all the under parts of the body from the breast are pure silvery white: the legs and toes are yellowish-grey.

Inhabits Brazil: it builds its nest on trees, on which it roosts at night, and when not on the water, being very rarely seen on the ground: it feeds upon fish, which it catches most dexterously, darting upon them with great rapidity. These birds delight to sit in little communities, on the dry limbs of trees, hanging over still waters, with their wings and tails expanded; and when any one approaches, drop off the limb into the water as if dead, and for a minute or two are not seen; when on a sudden, at a vast distance, their long slender heads and necks only appear, having much the resemblance of snakes, as no other part of them is visible, whilst swimming, except occasionally the tip of the tail.

LARIDÆ.

THE birds comprised in this family are distinguished by the great length of their wings, by their beak being destitute of denticulation, but bent down at the tip in some of the genera, and simply pointed in the others. Again, their hinder toe is not included in the same membrane which invests the others, but is either free or totally wanting.

All the species affect the high seas, and by means of their long wings they fly to great distances from land, many of them having been observed by mariners at several hundred leagues therefrom. They subsist usually upon fishes and mollusca, and some of them upon small Alcadæ, the refuse materials thrown from ships, and all kinds of fat greasy matter floating upon the surface of the water; they are mostly very voracious.

DIVISION I.

Rostrum *rectum, acutum.*
Beak straight, acute.

RHYNCHOPS. SKIMMER.

Generic Character.

Rostrum capite longior, rectum, compressum, apice truncato; mandibulâ superiore multo breviore, inferiore apice truncato.	*Beak* longer than the head, straight, compressed, its tip truncated; the upper mandible much shorter than the under, which has its apex also truncated.
Nares lineares.	*Nostrils* linear.
Cauda furcata.	*Tail* forked.
Pedes graciles, *digito* postico minuto.	*Legs* slender, the hinder *toe* minute.

RHYNCHOPS. Linn., Gmel., Lath., &c.
RYGCHOPSALIA. Briss.
PLOTUS. Klein.

THE Skimmers are distinguished from all other birds by the very extraordinary form of their beak, which has its upper mandible considerably shorter than their under, and grooved beneath, so as to receive the edge of the lower, which is extremely thin; the sides of both mandibles have several slight furrows: the nostrils are large and pervious, and placed in a hollow near the base and edge of the upper mandible, where it projects greatly over the lower. The

tail is forked; and the legs and feet are very similar to those of the Terns, to which genus these birds are also greatly allied, from their long wings and manners of life. There are two species known.

BLACK SKIMMER.

(Rhynchops nigra.)

Rh. *nigricans subtus alba, rostro basi rubro.*
Dusky Skimmer-beneath white, with the base of the beak red.
Rhynchops nigra. *Linn. Syst. Nat.* x. 1. 228. *Gmel. Syst. Nat.* 1. 611. *Lath. Ind. Orn.* 2. 802. *Shaw, Nat. Misc. pl.* 325.
Rygchopsalia. *Briss. Orn.* 6. 223. *pl.* 21. *f.* 2.
Avis maderaspatanos major novaculæ facie. *Raii Syn.* 194. *pl.* 1. *f.* 5.
Le bec en ciseaux. *Buff. Ois.* 8. 454. *pl.* 36. *Buff. Pl. Enl.* 357.
Coupeur d'eau. *Cuv. Reg. Anim.* 1. 522.
Cutwater. *Catesby, Carol.* 1. *pl.* 90.
Black Skimmer. *Edw. Glean. pl.* 281. (beak). *Penn. Arct. Zool.* 2. 445. *Lath. Gen. Syn.* 6. 347. *pl. in title. Lath. Gen. Hist.* x. 96. *Wils. Amer. Orn.* vii. 85. *pl.* lx. *f.* 4.
Variety.—Rhynchops fulva. *Linn. Syst. Nat.* 1. 229.
Rygchopsalia fulva. *Briss. Orn.* 6. 227. *A.*

This singular bird is twenty inches in length: its beak is red at its base and black at its tip: the forehead, chin, and under parts of its plumage, are white: the rest of the head, and the upper parts of the body and wings, are dusky black: the wings are crossed by a white bar: the tail is considerably shorter than the wings, and forked; the two middle feathers are



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BLACK SKIMMER.

black; the next on each side the same outwardly margined with white; the four outer ones white, dashed with dusky down the shafts, least on the outer feathers: legs slender and red; claws black. Both sexes are alike; but varieties of each sometimes occur; some being brown instead of black, and having the white less pure: others have those parts of a fulvous colour that are usually of a black brown.

This species inhabits various parts of the American continent, from New York to the Brazils. It is generally on the wing, and skims on the surface of the water, continually dipping in its beak to take up the small fish, which are its principal food: in stormy weather it seeks the shore, and chiefly subsists upon shrimps, small crabs, &c. Its voice is harsh and screaming, resembling that of the Terns, but stronger. It flies slowly, dipping occasionally, with steady expanded wings and bended neck, its lower mandible into the sea, and with open mouth receiving its food as it ploughs along the surface: it is rarely seen swimming on the water; but frequently rests in large parties on the sand bars at low water. On the coast of Virginia these birds may be observed in flocks of several hundreds together; and upwards of twenty nests have been found within the space of a square rod: the nest is a mere hollow formed in the sand, without any other materials: the female lays there eggs, almost exactly oval, of a clear white, marked with large round spots of brownish-black, and intermixed with others of pale ink colour: they are frequently eaten, but have a fishy taste: the female sits on them only during the night, or in wet and stormy

weather. The young are at first so exactly of a colour with the sand on which they sit, as to be with difficulty discovered: they are several weeks before they fly, during which time they are assiduously attended by the parents: when the young are able to leave, they depart to other countries, but rarely proceed far out to sea.

YELLOW-BEAKED SKIMMER.

(Rhynchops flavirostris.)

Rh. *corpore supra cinereo-fusco, subtus albo; rostro flavo; pedibus fuscis.*

Skimmer with the body above ashy-brown, beneath white, the beak yellow, the legs brown.

Rhynchops flavirostris. *Vieil. 2 Edit. du Nouv. Dict. d'Hist. Nat. t.* iii. *p.* 358.

This bird has the forehead, the throat, all the under parts of the body, the tips of the upper wing-coverts and secondary quills white: the rest of the plumage is ashy-grey. Inhabits the rivers of Senegal and Gambia.

ANOÜS. NODDY.

Generic Character.

Rostrum capite longum, subulatum, subrectum, acutum, compressiusculum; mandibulâ superiore paulò inclinatâ.	*Beak* as long as the head, subulated, nearly straight, pointed, compressed; the upper mandible a little inclined.
Nares lineares, basales.	*Nostrils* linear, basal.
Alæ mediocres.	*Wings* medial.
Cauda haud furcata.	*Tail* not forked.
Pedes tetradactyli, debiles; *digito* postico minuto, *ungues* parvæ.	*Legs* four-toed, weak; the hinder *toe* minute, the *claws* small.

ANOÜS. Leach. MS.
STERNA. Linn., Gmel., Lath.
GAVIA. Briss.
PASSER. Ray.

THE Noddies differ from the Terns and Viralves by having the tail nearly equal with the wings, and even at the end: their beak also differs from that of either of the above genera in its form, which approaches somewhat to that of the beak of the Gulls. They are said to be a very stupid race of birds, and to allow themselves to be knocked on the head without at-

tempting to remove from the place: they are usually of very dark and sombre colours; and are found within the tropics.

BLACK NODDY.

(Anoüs niger.)

An. *corpore nigro, fronte albicante, superciliis atris, rostro pedibusque nigris.*

Noddy with a black body, whitish forehead, dark-coloured eyebrows, and black legs and beak.

Sterna stolida. *Linn. Syst. Nat.* 1. 227. *Gmel. Syst. Nat.* 1. 605. *Lath. Ind. Orn.* 2. 805.

Sterna Philippina. *Lath. Gen. Syn.* 2. 805?

Passer stultus. *Raii Syn.* 154.

Gavia fusca. *Briss. Orn.* 6. 199. *pl.* 18. *f.* 2.

La Mouette brune. *Buff. Pl. Enl.* 997.

Le Noddi noir, Oiseau fou, &c. *Cuv. Reg. Anim.* 1. 522.

Le petit Fouquet des Philippines. *Sonner. Voy. Ind.* 125. *pl.* 85.

Philippine Tern. *Lath. Gen. Syn. Sup.* 267.

Noddy. *Buff. Hist. Nat. Ois.* 8. 461. *pl.* 37. *Catesb. Carol.* 1. *pl.* 88. *Lath. Gen. Syn.* 6. 354. *Lath. Gen. Hist.* x. 104.

The length of this bird is fifteen inches: its beak is slender and black: its entire plumage is of a sooty brown, the top of the head excepted; this is white, changing to ash colour towards the occiput: the quills and tail are blackish-brown: the legs are black.

A common species within the tropical seas: it is said to breed in the rocky ledges of St. Helena, and in the Bermuda Islands, and various parts of Brazil and Cayenne. They fly about in flocks during the



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BLACK NODDY.

period of incubation, and are very noisy. They are called Noddies from their apparent stupidity in flying into ships, and allowing themselves to be caught by the hand; but they will frequently inflict very severe wounds with their beak, and scratch with their claws those persons who attempt to catch them.

DUSKY NODDY.

(Anoüs fuscatus.)

An. *corpore nigricante immaculato, pedibus rubris, rostro fusco.*
Noddy with an immaculate dusky body, red legs, and brown beak.
Sterna fuscata. *Linn. Syst. Nat.* 1. 228. *Gmel. Syst. Nat.* 1. 610. *Lath. Ind. Orn.* 2. 807.
Sterna fusca. *Briss. Orn.* 6. 220. *pl.* 21. *f.* 1.
Dusky Tern. *Lath. Gen. Syn.* 6. 360. *Lath. Gen. Hist.* x. 129.

The Dusky Noddy is in length eleven inches: its beak is greyish-brown with its tip black: the head, throat, and hind part of the neck are dusky brown: the back, rump, scapulars, and upper tail-coverts the same, with the edges of the feathers rufous: the lesser and middle wing coverts dusky brown above: the greater coverts dusky: the quills dusky, the shafts beneath white: the two next the body tipped with rufous: the fore part of the neck and all the under parts of the plumage are brown: tail dusky, the two middle feathers with rufous tips: legs dull red: claws black. Inhabits St. Domingo.

SHORT-TAILED NODDY.

(Anoüs plumbea.)

An. *albus, vertex, auriculæ, maculâ ante oculos, occipiteque nigris, dorso humerisque saturatè cinereis, pennis apice fuscis, alis caudâque plumbeis.*

White Noddy with the crown, auriculars, a spot before the eyes, and the occiput black, the back and shoulders dark ash, the tips of the feathers brown, the wings and tail lead-coloured.

Sterna plumbea, or short-tailed Tern. *Wils. Amer. Orn. v.* vii. *p.* 83. *pl.* lxx. *f.* 3.

Short-tailed Tern. *Lath. Gen. Hist.* x. 130.

Length eight inches and a half: the beak, crown, auricles, spot before the eye and the occiput black: the forehead, eyelids, sides of the neck passing round to the nape, and all the under parts, pure white: back and shoulders dark cinereous, the feathers broadly tipped with brown: wings and tail dark lead colour: legs tawny.

Inhabits America: discovered by Wilson after a violent storm, which inundated the meadows of Schuylkill, and by causing the insects therein to float on the water, attracted several hundreds of this species; some of which were killed, and upon examination proved to be non-descript: their stomachs were found to contain grasshoppers, crickets, spiders, &c. but no fish.

BROWN NODDY.

(Anoüs? spadicea.)

An. *fusco-rubescens, crisso albo, dorsi pennis tectricibusque alarum margine albidis, scapularibus remigibusque secundariis apice albis.*

Red-brown Noddy, with the vent white, the feathers of the back and wing-coverts edged with whitish, the scapulars and secondary quills white at the tip.

Sterna spadicea. *Gmel. Syst. Nat.* 1. 610. *Lath. Ind. Orn.* 2. 807.

Brown Tern. *Lath. Gen. Syn.* 6. 359. *Lath. Gen. Hist.* x. 129.

Inhabits Cayenne: length fifteen inches: beak black: the prevailing colour of the plumage is reddish-brown; the under parts palest: the head, neck, and under parts are uniform in colour, but the edges of the feathers of the back and wing-coverts are reddish-white: the scapulars and secondaries are tipped with white: the under wing-coverts and the ridges of the wings are white: the quills and tail are dusky, with the shafts of the feathers white beneath: the legs are pale reddish-brown; the claws are black. It varies in having some of the feathers on the neck and breast edged with dusky.

STERNA. TERN.

Generic Character.

Rostrum capite longior, gracile, subrectum, compressiusculum apice acuto; mandibulâ superiore deflexo.
Nares oblongæ, basales.
Alæ longissimæ.
Cauda valdè forficata.
Pedes tetradactyli, debiles; *digito* postico minuto, *ungues* parvæ.

Beak longer than the head, slender, nearly straight, rather compressed, the tip pointed, the upper mandible bent down.
Nostrils oblong, nasal.
Wings very long.
Tail greatly forked.
Legs four-toed, weak; the hinder *toe* minute, the *claws* small.

STERNA. Linn., Gmel., Lath.
HIRUNDO. Ray.
LARUS. Ray.

THESE birds are readily distinguished by the great length of their wings and their forked tail, as well as by the form of their beak. In manner they somewhat resemble the Noddies, but are less stupid. They are more generally distributed over the globe, and are abundant in the temperate regions: their colours are

of a gayer description than either those of the Vivalres or Noddies; the predominating hue being a beautiful ashy-lead colour, often tinged with rosy.

Terns are perpetually on the wing, and when they rest seldom alight upon the water, but prefer the land, as they are bad swimmers. Their nourishment consists almost exclusively of small live fishes, which they seize upon while on the wing, descending like a shot to the water, and capturing their prey.

CASPIAN TERN.

(Sterna Caspia.)

St. *corpore suprà plumbeo-cinereo, subtus colloque albo, rostro coccineo, capillitio pedibusque nigris.*

Tern with the body above leaden-ash, beneath and neck white, the beak crimson, the capillitium and legs black.

Hirondelle de mer Tschegrava. *Temm. man. d'Orn.* 1. 2 *Edit.* ii. 733.

Sterna Caspica. *Gmel. Syst. Nat.* 1. 603. *Lath. Ind. Orn.* 5. 804. *Sparr. Mus. Carl. fas. pl.* 62.

Caspian Tern. *Penn. Arct. Zool.* 2. 526. *Lath. Gen. Syn.* 6. 350. *Lath. Gen. Hist.* x. 99.

The Caspian Tern is upwards of twenty inches in length: its beak is crimson: the irides are dull: the forehead, crown, hind head, and round the eyes, are deep black, with a few dots of white: on the lower eye-lid is a small whitish crescent: the hind part of the neck, and all the upper parts of the body, the

rump, and tail, are pure snowy white: the first six quills are deep ash-colour, the margins and tips blackish; the rest are coloured the same as the back: the legs are black.

Common in the Caspian Sea and its vicinity: it lays two or three large ashy-green eggs, spotted with brown. Its manners somewhat resemble those of the Gulls; and its voice is similar to the noise made by a person laughing.

CRESTED TERN.

(Sterna cristata.)

St. *cinereo-cana, corpore subtus colloque albis, vertice nigro, occipite subcristata, rectrice externâ à medio ad apicem albâ.*
Hoary ash-coloured Tern with the body beneath and neck white, the crown black, the occiput slightly crested, the outer tail-feathers from the middle to the tip white.
Sterna Caspia γ. *Lath. Ind. Orn.* 11. 804.
Caspian Tern *B.* *Lath. Gen. Syn.* vi. 351.
Crested Tern. *Lath. Gen. Hist.* x. 101.

Length about twenty inches: beak three inches, stout, pale and yellow: nostrils pervious: the crown black, the feathers elongated and forming a pinnacle crest at the nape; the rest of the head, neck, and under parts of the body white: back and wings pale ashy-grey: quills grey, with the ends dusky: inner webs, half way from the base, white: tail grey, the end half of the feathers white: the shafts of the quills and tail white: legs black. The female? has the

crown somewhat mottled with grey, and the wings darker coloured. Inhabits China; and many of the south-eastern islands of Asia.

SANDWICH TERN.

(Sterna cantiaca.)

St. *alba dorso alisque canis, pileo nigro, fronte maculis albis, remigibus nigricantibus scapis albis.*

White Tern with the back and wings hoary, the pileus black, the forehead with white spots, the quills dusky with white shafts.

Sterna cantiaca.—Hirondelle de mer cangek. *Temm. man. d'Orn.* 479. *Id.* 2 *Edit.* ii. 735.

Winter Plumage.—Sterna cantiaca. *Gmel. Syst. Nat.* 1. 606. *Linn. Trans.* 13. 329.

Summer Plumage.—Sterna Boysii. *Lath. Ind. Orn.* 2. 806.

Greater Sea Swallow. *Alb. Birds,* 2. *pl.* 88.

Sandwich Tern. *Lath. Gen. Syn.* 6. 356. *Lath. Syn. Sup.* 266. *Boys' Sandwich, p.* 851. *Lew. Brit. Birds,* 6. *pl.* 203. *Walc. Syn.* 1. *pl.* 120. *Don. Brit. Birds,* 5. *pl.* 120. *Mont. Orn. Dict.* 2. *and Supp. with fig. Bew. Brit. Birds,* 2. 204. *Lath. Gen. Hist.* x. 106.

Immature Summer Plumage.—Sterna Africana. *Gmel. Syst. Nat.* 1. 605. *Lath. Ind. Orn.* 2. 105.

African Tern. *Lath. Gen. Syn.* 6. 354. *Lath. Gen. Hist.* x. 108.

Young.—Sterna striata. *Gmel. Syst. Nat.* 1. 609? *Lath. Ind. Orn.* 2. 807?

Sterna nebulosa. *Sparr. Mus. Carls. fas. pl.* 63.

Striated Tern. *Lath. Gen. Syn.* 6. 358. *pl.* 98?

During the winter season, this species has the beak of a deep black, with its tip yellow: its irides are

blackish: the forehead and the top of the head are pure white; the hinder part of the latter is slightly sprinkled with black spots, which are placed in the centre of the feathers: the feathers of the occiput are rather long, and are deep black with white edges: before the eyes is a black crescent: the nape, upper part of the back, all the under parts, and the tail are clear glossy white: the rest of the back, the scapulars and wing-coverts are bright bluish-ash: the quills are of a velvet-grey, and are all bordered on their inner webs by a broad white band: the legs are black; with the under part of the foot yellow-ochre colour. During the spring and summer, the forehead, top of the head, and the occipital feathers are deep black: the rest of the plumage resembles that of the winter. The young about the head resemble their parents in the winter, and like them their under parts are pure white. The back and scapulars are whitish-ash, transversely rayed with blackish-brown bars; the larger scapulars are edged with brown: the wing-coverts are tipped with semicircular bands: the secondaries and quills are blackish-ash, edged and tipped with white: the tail-feathers are ash-coloured at their base, then blackish, and tipped with white: the beak is black, with the tip yellowish.

This species inhabits the sea-coasts, and appears to be freely distributed over all those of Europe: on those of this country it is however not very frequent, except in the neighbourhood of Sandwich, where it was discovered by Mr. Boys, of that place, who communicated his discovery to Dr. Latham. It also occurs on the coasts of Northumberland, as Bewick's

account tells us. Its nest and eggs have not hitherto been discovered in England, but, according to Temminck, it builds in large flocks on the strands of the sea, in salt marshes, or on the naked rocks; laying two or three whitish eggs, marked with black spots of various sizes. It feeds on fishes.

WHITE-BROWED TERN.

(Sterna superciliaris.)

St. *vertice nigro alboque vario, occipite nigro, corpore suprà cærulescente-cinereo, subtus superciliisque albis, remigibus quatuor primariis nigris.*

Tern with the crown varied with black and white, the occiput black, the body above bluish-ash, beneath and eyelids white, the four primary quills black.

L'Hirondelle de mer à sourcils blancs.—Sterna superciliaris. *Vieil. 2 Edit. du Nouv. Dict. d'Hist. Nat. t.* 32—176.

White-browed Tern. *Lath. Gen. Hist.* x. 108.

Young?—Sterna maculata. *Vieil. l. c.?*

Length eight inches: over the eye a broad band of white, and a second of black and white beneath, surrounding the eye: the sides of the head, and all the under parts of the plumage, white: the top of the head marbled with black and white: the occiput black: the body above and wings blue-grey; the four outer quills blackish. Inhabits Paraguay; discovered by d'Azara.

COMMON TERN.

(Sterna Hirundo.)

St. *rostro pedibusque sanguineis, rectricibus duâbus externis albo nigroque dimidiatis.*

Tern with the beak and legs blood red, the two outer tail-feathers half black half white.

Sterna Hirundo. *Linn. Syst. Nat.* 1. 227. *Gmel. Syst. Nat.* 1. 606. *Lath. Ind. Orn.* 2. 807.

Hirundo marina. *Raii Syn.* 131. *A.*

Sterna major. *Briss. Orn.* 6. 203. *pl.* 19. *f.* 1.

L'Hirondelle de mer pierre garin. *Buff. Hist. Nat. Ois.* 8. 331. *pl.* 27. *Buff. Pl. Enl.* 987. *Temm. man. d'Orn.* 481. *Id.* 2 *Edit.* ii. 744. *Cuv. Reg. Anim.* 1. 521.

Greater Tern (or Common). *Penn. Brit. Zool.* 2. 254. *pl.* 90. *Lath. Gen. Syn.* 6. 361. *Lew. Brit. Birds,* 6. *pl.* 204. *Walc. Syn.* 1. *pl.* 119. *Don. Brit. Birds,* 1. *pl.* 23. *Mont. Orn. Dict.* 2. *and Supp. Bew. Brit. Birds,* 2. 129. *Wils. Amer. Orn.* vii. 76. *pl.* lxx. *f.* 1. *Lath. Gen. Hist.* x. 114.

Length upwards of fourteen inches: its beak is crimson, with its tip dusky: the irides are reddish-brown: the forehead, top of the head, and the long occipital feathers are deep black: the hinder part of the neck, the back, and wings are bluish-ash: the under parts are pure white, the breast excepted, which is slightly shaded with cinereous; the quills are whitish-ash tipped with brown-ash: the tail is white; with its two lateral feathers blackish-brown on their outer webs: the legs are red. The young after the first autumnal moult have the forehead and part of the top of the head of a dirty white, marked



COMMON TERN.

with blackish spots towards the occiput; the long feathers of which are brownish-black, finely edged and tipped with whitish: the upper parts of the body are of a dull ashy-blue, with all the feathers edged and tipped with whitish, and irregularly spotted with clear brown: the under parts are dull dirty white: the tail-feathers are ash-coloured, tipped with whitish: the base of the beak is dull orange; the irides are dusky brown; the legs orange.

Inhabits the sea-coasts, and collections of water in their vicinity, and is a very common species in all parts of Europe, and also of North America: it is common on those of Britain. About June it lays two or three eggs of an ashy-brown colour, marked with numerous irregular spots of blackish and ash-colour: the young are hatched in July, and fly in about six weeks. It is a bold bird, and during the period of incubation will attack any person approaching too near its nest. It is often called the Sea Swallow, as it is continually on the wing, and is, moreover, very active in pursuit of its prey.

ARCTIC TERN.

(Sterna arctica.)

St. *rostro rufo, apice nigro ; tarsis brevibus ; caudâ valdè furcatâ.*
Tern with the beak red, its tip black, the tarsi short, the tail very much forked.
Sterna arctica. *Sabine, Frank. Journ. App.* 694. *Parry's App. p.* ccii.
Hirondelle de mer arctique. *Temm. man. d'Orn.* 2 *Edit.* ii. 742.
Arctic Tern. *Lath. Gen. Hist.* x. 116.

Length fourteen inches : beak bright red : irides brown : crown and nape deep black : beneath the eye a streak of white : the rest of the upper parts of the plumage similar in colour to those of the Common Tern, but of a deeper cinereous ; the throat, and fore part of the neck of a deeper hue than the back : part of the belly and the tail-coverts white : tail much forked : legs red : the tarsi and toes very short.

Resembles the Common Tern, but readily distinguished by the brevity of its tarsi, and by the beak being entirely red, without a black tip.

It was discovered during the expedition to the northern regions by Captain Sabine, and is said to be frequent in the arctic countries : it has lately been found also on the coasts of Scotland, the Orcades, and on the shores of the Baltic, and according to Dr. Latham, in his new edition, it has been found at Sandwich in Kent. Its manners are unknown, except that it feeds upon fishes.

ROSEATE TERN.

(Sterna Dougallii.)

St. *vertice nuchâque nigris, corpore suprà cærulescente-cinereo, subtus rosaceo-albo, remige primâ nigro marginato; rectricibus duâbus exterioribus longissimis, angustis, tenuissimisque.*

Tern with the vertex and nape black, the body above bluish-ash, beneath rosy-white, the first quill edged with white, the two outer tail-feathers very long and narrow.

Roseate Tern.—Sterna Dougallii. *Mont. Orn. Dict. Supp. with fig. Lath. Gen. Hist.* x. 113.

Hirondelle de mer Dougallii. *Temm. man. d'Orn.* 2 *Edit.* ii. 738.

L' Hirondelle de mer rosée. *Vieil.* 2 *Edit. de Nouv. Dict. d'Hist. Nat. t.* 32. *p.* 174.

Montagu has given the following description of this new and beautiful species. "Length fifteen inches and a half: the beak one inch five-eighths long to the feathers on the forehead, slender, slightly curved, and of a jet black colour, except at the base, which is of a bright orange, extending about the eighth of an inch on the upper mandible from the corner of the mouth, round the front, and round the nostrils, and on the under mandible, extending from the angle of the mouth along the sides as far as the feathers on the chin, and rather beyond on the under part: the inside of the mouth and throat bright orange, becoming darker towards the end of the beak: irides black: the tongue one half the length of the beak, of a pale red colour, and bifurcated at the point: the forehead, crown, hind part, and sides of the head, taking in the eyes, except a small por-

tion of the lower part of the orbit, jet black: the black feathers on the hind head thinly diffused, and flowing over the white down on the back of the neck: the feathers on the sides of the head, extending in a narrow line along the upper mandible to the nostrils, and on the sides of the neck white: the whole under parts are white, but the fore part of the neck, breast, and belly, to beyond the vent, are tinged with a most delicate rosy-black: the back scapulars and coverts of the wings are pale cinereous-grey; the quill-feathers are narrow, the first has the exterior web black, with a hoary tinge; the others are hoary on that part; and part of the inner web next to the shafts of the first three or four is hoary black, becoming by degrees paler in the succeeding feathers, all deeply margined with white quite to the tip, and the shafts of all are white: length of the wing from the elbow to the extremity of the first quill-feather nine inches and a quarter: the tail is greatly forked; the outer feather is seven inches long, extending two inches beyond the wings when closed, extremely slender, and the end for an inch or more slightly ciliated; the middle feathers are scarcely three inches in length; they are all white, destitute of any markings: the legs and feet are bright orange; the claws black."

This elegant species was first discovered by Dr. M'Dougall of Glasgow, who shot several specimens in the West Highlands of Scotland, in July, 1812, and communicated them to Montagu: since that period it has been observed on the coasts of Picardy, in France, by M. Laillotte; and also in Norway, and other parts of Europe. It feeds upon fish.

CAYENNE TERN.

(Sterna Cayana.)

St. *grisea pennis rufo marginatis, occipite nigro, corpore subtus albo.*

Grey Tern with the feathers edged with red, the occiput black, the body beneath white.

Sterna Cayanensis. *Gmel. Syst. Nat.* 1. 604. *Lath. Ind. Orn.* 2. 804.

Le grand Hirondelle de mer de Cayenne. *Buff. Hist. Nat. Ois.* 8. 346. *Buff. Pl. Enl.* 988.

Cayenne Tern. *Lath. Gen. Syn.* 6. 352. *Lath. Gen. Hist.* x. 127.

Inhabits Cayenne: length sixteen inches: the hind part of the head black; the upper parts of the plumage grey, with pale rufous edges to all the feathers: the under parts of the body are white.

SURINAM TERN.

(Sterna Surinamensis.)

St. *cinerea subtus alba, rostro capite collo pectoreque nigris, pedibus rubris.*

Ash-coloured Tern beneath white, with the beak, head, neck, and breast black, the legs red.

Sterna Surinamensis. *Gmel. Syst. Nat.* 1. 604. *Lath. Ind. Orn.* 2. 804.

Surinam Tern. *Lath. Gen. Syn.* 6. 352. *Lath. Gen. Hist.* x. 124.

This bird is a native of Surinam: its beak, head, neck, and breast are described as being black: its back, wings, and tail, as being ash-coloured: the belly and thighs as being dirty white; the legs and feet red, and the claws black.

It is often seen two hundred leagues from land: its principal food consists of fish.

WREATHED TERN.

(Sterna vittata.)

St. *cinerascens, capite superiore nigro vittâ alba circumdato, uropygio crisso caudâque albis.*

Greyish Tern with the upper part of the head black, surrounded by a white wreath, the rump, vent, and tail white.

Sterna vittata. *Gmel. Syst. Nat.* 1. 609. *Lath. Ind. Orn.* 2. 807.

Wreathed Tern. *Lath. Gen. Syn.* 6. 359. *Lath. Gen. Hist.* x. 117.

Described by Latham from the collection of the late Sir Joseph Banks: "Length fifteen inches: beak rather slender, near two inches in length, and of a deep blood red: the top of the head, just taking in the eye on each side, and to the nape behind, black: this is bounded by a line of white all round: the rest of the plumage a very pale ash-colour, in some parts nearly white: the chin palest: rump, vent, and tail pure white; the outer feathers of the last inclines to ash-colour: legs orange." He adds, "a

second of these had a shorter beak: the tail ash-coloured, with white shafts; and the general colour of the plumage every where darker: probably a young bird. Inhabits Christmas Island."

PANAYAN TERN.

(Sterna Panaya.)

St. *subtus alba, vertice nigro maculato, cervice griseo-nigricante, alis caudâque fuscis.*

Tern beneath white, the crown spotted with black, the cervix dusky-griseous, the wings and tail brown.

Sterna Panayensis. *Gmel. Syst. Nat.* 1. 607.

Sterna Panaya. *Lath. Ind. Orn.* 2. 801.

L'Hirondelle de mer de l'Isle de Panay. *Sonn. Voy. Ind.* 125. *pl.* 84. *Buff. Hist. Nat. Ois.* 8. 344.

Panayan Tern. *Lath. Gen. Syn.* 6. 363. *Lath. Gen. Hist.* x. 119.

This bird greatly resembles the Common species, but its plumage is considerably darker above: it is the same size as that bird: its beak is black: the top of the head is spotted with black: the hind part of the neck greyish-black: the wings and tail are of an umbre-colour above and greyish beneath: the fore part of the neck, the breast, and the belly, are white: the legs are black. Inhabits the Island of Panay.

JAVAN TERN.

(Sterna Javanica.)

St. *glauca, gulâ malis cervice postice alis caudâque infra albis, capite suprà nigro, remigibus griseo-fuscescentibus internè plagâ albidâ notatis, rostro pedibusque flavis.*

Glaucous Tern, with the throat, cheeks, cervix behind, wings, and tail beneath white, the head above black, the quills grey-brownish marked internally with a white dash, the beak and legs yellow.

Sterna Javanica. *Horsfield, Linn. Trans.* xiii. 198.

Javan Tern. *Lath. Gen. Hist.* x. 125.

Length eleven inches: prevailing colour glaucous, throat, cheeks, neck behind, wings and tail beneath white: head above black: quills brownish-grey, marked within with a whitish patch: beak and legs yellow. Inhabits Java.

BLACK-NAPED TERN.

(Sterna media.)

St. *fronte cervice postice et partibus inferioribus albis, pileo albo nigroque vario, nuchâ atrâ, alis dorso uropygioque glaucis, remigibus suprà fuscis cano pulverulentis, subtus dimidio exteriore intensè glaucis interiore albis.*

Tern with the forehead, neck behind, and under parts of the body white, the pileus varied with white and black, the nape dark, the wings, back, and rump glaucous, the quills above brown sprinkled with hoary, beneath with the outer half intense glaucous, the interior white.

Sterna media. *Horsfield. Linn. Trans.* xiii. 199.
Black-naped Tern. *Lath. Gen. Hist.* x. 126.

LENGTH fifteen inches: beak long: forehead, neck behind, and under parts of the body white: crown varied with black and white: nape black; wings, back, and rump glaucous: quills brown, powdered with grey: feet black: the interior border of the sixth, seventh, and eighth quills, is white, and very regularly defined. Inhabits Java.

HOARY TERN.

(Sterna grisea.)

ST. *supra grisea, corpore subtus, collari fronteque albis, remige exteriore nigricante, rostro nigro.*
Tern above grey, with the body beneath, the collar and forehead white, the outer quills dusky, the beak black.
Sterna grisea. *Horsfield. Linn. Trans.* xiii. 199.
Hoary Tern. *Lath. Gen. Hist.* x. 126.

LENGTH nine inches: beak black: body above grey: forehead, a collar round the neck, and the under parts of the body white; the outer quill dusky. Inhabits Java.

WHITE TERN.

(Sterna alba.)

St. *corpore toto albo, rostro pedibus nigris.*
Tern with the body entirely white, the beak and legs black.
Sterna alba. *Sparr. Mus. Carls. fas.* 3. *pl.* 11. *Gmel. Syst. Nat.* 1. 607. *Lath. Ind. Orn.* 2. 808.
Sterna candida. *Gmel. Syst. Nat.* 1. 607.
White Tern. *Lath. Gen. Syn.* 6. 363. *Lath. Syn. Sup.* 266. *Lath. Gen. Hist.* x. 109.

Inhabits various parts of the East Indies, the Cape of Good Hope, and other southern parts: its length is thirteen inches: its beak is slender and black: the eye-lids are also black: the general colour of the plumage is snowy white; with the shafts of the quills, scapulars, and tail (except its three outer feathers) black: the legs are brown; the webs orange, and the claws black.

EGYPTIAN TERN.

(Sterna Nilotica.)

St. *cinerea subtus alba, vertice colloque superiore maculis nigricantibus, orbitis nigris albo-maculatis.*
Ash-coloured Tern beneath white, with the crown and neck above with dusky spots, the orbits black spotted with white.

Sterna Nilotica. *Gmel. Syst. Nat.* 1. 606. *Lath. Ind. Orn.* 2. 806.
Egyptian Tern. *Lath. Gen. Syn.* 6. 976. *Lath. Gen. Hist.* x. 110.

DESCRIBED as being of the size of a Pigeon: its beak is black: the head and upper part of the neck cinereous, sprinkled with small blackish spots: orbits black, dotted with white: the back, wings, and tail cinereous: the outer quills deep cinereous: all the under-parts of the plumage white: the legs red: claws black. Inhabits Egypt: appearing in flocks on the mud of the Nile, during the month of January: it feeds on insects, small fish, &c.

NEW HOLLAND TERN.

(Sterna Novæ Hollandiæ.)

ST. *fusca, subtus fronteque alba, dorso variegato.*
Brown Tern with the under parts and forehead white, the back variegated.
New Holland Tern. *Lath. Gen. Hist.* x. 103.

"LENGTH fourteen or fifteen inches: beak one inch and a half; black, curved at the tip: irides blue: tongue longish and pointed: top of the head and behind the neck brown: back the same, but darker and mottled: forehead and all beneath white: quills brown; reaching much beyond the tail: legs

brown, bare greatly above the knee. Inhabits New Holland."—*Latham.*

SOUTHERN TERN.

(Sterna Australis.)

St. *cinerea subtus grisea, fronte albo-flavescente, remigibus albis.*
Ash-coloured Tern beneath grey, with the forehead whitish-yellow, the quills white.
Sterna Australis. *Gmel. Syst. Nat.* 1. 608. *Lath. Ind. Orn.* 2. 809.
Southern Tern. *Lath. Gen. Syn.* 6. 365. *Lath. Gen. Hist.* x. 126.

A very small species, measuring only seven inches and a half in length: its beak is black: the forehead dirty buff-colour: the back, wings, and tail are dirty pale cinereous: the quills are white: the under parts of the plumage are grey: the tail is forked: the legs dusky black, with the webs orange. Inhabits Christmas Island.

LITTLE TERN.

(Sterna minuta.)

St. *corpore albo, dorso cano, fronte superciliisque albis*
Tern with the body white, the back hoary, the forehead and eyebrows white.
Sterna minuta. *Linn. Syst. Nat.* 1. 228. *Gmel. Syst. Nat.* 1. 608. *Lath. Ind. Orn.* 2. 809.
Sterna minor. *Briss. Orn.* 6. 206. *pl.* 19. *f.* 2.
Sterna metopoleucos. *Gmel. Syst. Nat.* 1. 608. *Lath. Ind. Orn.* 2. 809.
Larus piscator Aldrovandi. *Raii Syn.* 101. *A.*
La petite Hirondelle de mer. *Buff. Hist. Nat. Ois.* 8. 337. *Buff. Pl. Enl.* 996. *Temm. man. d'Orn.* 487. *Id.* 2 *Edit.* ii. 753. *Cuv. Reg. Anim.* 1. 521.
Hooded Tern. *Lath. Gen. Syn.* 6. 365.
Lesser Tern. *Penn. Brit. Zool.* 2. 255. *pl.* 90. *Penn. Arct. Zool.* 2. 449. *Lath. Gen. Syn.* 6. 364. *Lew. Brit. Birds,* 6. *pl.* 205. *Walc. Syn.* 1. *pl.* 121. *Don. Brit. Birds,* 4. *pl.* 96. *Mont. Orn. Dict.* 2. *and Supp. Bew. Brit. Birds,* 2. 201. *Wils. Amer. Orn.* vii. 80. *pl.* lx. *f.* 2. *Lath. Gen. Hist.* x. 120.

Between eight and nine inches in length: the beak is of an orange-yellow, with its tip black: irides black: the forehead, and a streak above the eyes, pure white: between the beak and the eye is a longitudinal stripe of black: the top of the head, the occiput, and the head are deep black: the back and wings are of a pure ashy-blue: all the under parts, the rump, and the tail are white: the shafts of the quills are brown: the legs are reddish-orange. The young, before the first autumnal moult, have the forehead of

a yellowish-white: the tip of the head, the occiput, and the nape are brown, striped with blackish: before and behind the eyes is a black spot: the back and wings are yellowish-brown; the shafts of the quills and margins of all the other feathers are blackish-ash: the tail and wing-feathers are tipped with yellowish-white. After moulting the head becomes clothed with black feathers; the under parts become of a clear bluish-ash; but the tail-feathers retain their dull tint.

Like the Common Tern this species is frequent on the sea-coasts of most countries of Europe, and is very abundant on those of Britain, Holland, and France: its manners greatly resemble those of that bird: it lays its eggs on the strand of the seas or on the naked rocks; they are two or three in number, of a clear greenish hue, marked with large spots of brown and ash-colour. The young are hatched in June, and are able to fly the first or second week in July.

The food of this species consists chiefly of small insects and marine vermes; also the fry of fish, and other floating objects.

SOOTY TERN.

(Sterna fuliginosa.)

St. *fuliginoso atra, fronte corporeque subtus albis, striga per oculos nigris.*

Dark-sooty Tern with the forehead and body beneath white, and a black stripe passing through the eyes.

Sterna fuliginosa. *Gmel. Syst. Nat.* 1. 605. *Lath. Ind. Orn.* 2. 804.

L' Hirondelle de mer à grande envergure. *Buff. Hist. Nat. Ois.* 8. 345.

Sooty Tern. *Lath. Gen. Syn.* 6. 352. *Penn. Arct. Zool.* 2. 447. *Wils. Amer. Orn. v.* 8. *p.* 145. *pl.* lxxii. *f.* 7. *Lath. Gen. Hist.* x. 102. *pl.* clxxiv.

The Sooty Tern is in length sixteen inches: its beak is black: the forehead is white, the colour passing on each side to the upper part of the eye, where it ends in a point: through the eyes, passing to the hind head, is a streak of black: the crown, nape, hind part of the neck, and all the upper parts of the body, the wings and tail are black: the inner ridge of the wing white; the quills dark greyish-black: the under parts of the plumage, from the chin, white, passing a little backwards at the lower part of the neck: the outer web of the exterior tail-feathers white, except the tip: the shafts of the quills and tail are white beneath; the legs are black.

Found in most parts of the southern temperate regions, being met with by navigators on the coasts of New Holland, the Island of Ascension, New Guinea, Christmas Island, and other parts. It is said to lay a single egg on the bare ground, in December.

VIRALVA. VIRALVE.

Generic Character.

Rostrum capite brevior, subulatum, subrectum, compressiusculum, apice subinclinato; mandibulâ superiore ferè rectum.	*Beak* shorter than the head, subulated, nearly straight, slightly compressed, the tip a little inclined: the upper mandible nearly straight.
Nares oblongæ, basales.	*Nostrils* oblong, basal.
Alæ longæ.	*Wings* long.
Cauda subfurcata.	*Tail* slightly forked.
Pedes tetradactyli, debiles; *digito* postico minuto; *ungues* parvæ.	*Feet* four-toed, slender; the *hinder toe* minute; *claws* small.

VIRALVA. Leach.
STERNA. Linn., Gmel., Lath., &c.
LARUS. Ray.

THE beak of the Viralves is shorter than that of the Terns, and the point is slightly bent down; their wings are also shorter, and the tail is but slightly furcate. Unlike the Terns these birds seldom feed on fishes, but prefer insects, such as dragon-flies and moths, and aquatic vermes.



BLACK VIRALVE.

BLACK VIRALVE.

(Viralva nigra.)

VI. *corpore nigro vel cano, dorso cinereo.*
Viralve with the body black or hoary, the back ash-coloured.
Sterna nigra. *Linn. Syst. Nat.* 1. 227. *Gmel. Syst. Nat.* 1. 608. *Lath. Ind. Orn.* 2. 810. *Briss. Orn.* 6. 211.
Sterna fidipes. *Linn. Syst. Nat.* 1. 228. *Gmel. Syst. Nat.* 1. 610. *Lath. Ind. Orn.* 2. 810.
Sterna atricapilla. *Briss. Orn.* 6. 214.
Sterna cinerea. *Lath. Ind. Orn.* ii. 808?
Larus niger Gesneri. *Raii Syn.* 131. *A.*
Larus niger fidipes alis longioribus Aldrovandi. *Raii Syn.* 131.
Larus minor fidipes nostras. *Raii Syn.* 132. *A.*
Viralva nigra. *Leach in Brit. Mus. Collection.*
Hirondelle de mer noire, ou l'Epouventail. *Buff. Hist. Nat. Ois.* 8. 341. *Buff. Pl. Enl.* 333. *Temm. man. d'Orn.* 484. *Id.* 2 *Edit.* ii. 749. *Cuv. Reg. Anim.* 1. 521.
Hirondelle de mer à tête noire, ou le Gachet. *Buff. Hist. Nat. Ois.* 8. 342.
Lesser Sea Swallow. *Alb. Birds,* 2. *pl.* 89.
Black Tern. *Penn. Brit. Zool.* 2. 256. *Penn. Arct. Zool.* 2. 450. *Lath. Gen. Syn.* 6. 366. *Lath. Syn. Sup.* 267. *Lew. Brit. Birds,* 6. *pl.* 206. *Walc. Syn.* 1. *pl.* 122. *Don. Brit. Birds,* 4. *pl.* 74. *Mont. Orn. Dict.* 2. *and Supp. Bew. Brit. Birds,* 2. 203. *Lath. Gen. Hist.* x. 121.
YOUNG.—Sterna nævia. *Gmel. Syst. Nat.* 1. 609. *Linn. Syst. Nat.* 1. 228. *Briss. Orn.* 6. 216. *pl.* 20. *f.* 2.
Sterna Boysii, β. *Lath. Ind. Orn.* 2. 806.
La Guiffette. *Buff. Hist. Nat. Ois.* 8. 339. *Buff. Pl. Enl.* 924.
Lesser Sea Swallow. *Alb. Birds,* 2. 90.
Kamtschatkan Tern. *Penn. Arct. Zool.* 2. 525. *Lath. Gen. Hist.* x. 123.
Sandwich Tern. *Lath. Gen. Syn.* 6. 358. *A.*
Black-headed Tern. *Lath. Gen. Hist.* x. 123.

Nearly ten inches in length: beak black: irides brown: the head and hinder part of the neck are deep black: the throat, fore part of the neck, breast, belly, and abdomen are blackish-ash: all the upper parts, the rump, and the tail-feathers are ashy-blue, or lead-colour: the under tail-coverts are pure white: the two first wing-quills are edged with white at the extremity of the inner webs: the legs are brown, or a blackish-purple. The young have the beak brown at the base: the irides brown: the forehead, space between the beak and the eye, the sides, and fore part of the neck, as well as all the under parts are pure white: on the sides of the breast is a large spot of blackish-ash: before the eyes is a black lunule: the top of the head, the occiput and the nape are also black: the back and scapulars are brown edged and tipped with reddish-white: the wings, rump, and tail are ash-coloured: the coverts are tipped with reddish-white: the legs are livid brown. In their progress to maturity they vary in the disposition of the colour of the plumage, as the neck, belly, and vent are sometimes all white, or varied with white feathers, or those of a blackish ash-colour, as in the adult.

This species, like its congeners, prefers the borders of fresh-water lakes, the banks of large rivers, and marshy places, rather than the coasts of the sea: it is very abundant in the North, towards the Arctic Circle, and in the extensive marshes of Holland. In Britain it occurs on the fenny parts of Lincolnshire and Cambridgeshire, and about the sedgy pools on Romsey Marsh, in Kent; in which places it breeds,

laying from two to four light olive-brown eggs, blotched and spotted with brown and black. It subsists on insects and aquatic vermes, and principally upon those inhabiting fresh water.

TEHARY VIRALVE.

(Viralva Indica.)

VI. *corpore subtus capite colloque albis, pileo, occipite nuchâque nigris, alis dorso caudâque griseo-cæruleis.*

Viralve with the body beneath the head and neck white, the pileus, occiput, and nape black, the wings, back, and tail bluish-grey.

Tehary Tern. *Lath. Gen. Hist.* x. 103.

INHABITS India. "Beak stout and black: irides dusky: head, neck, and under parts, white: from the middle of the crown to the nape black; back, wings, and tail, pale ashy-blue, the last moderately forked, the wings exceed it by about two inches: legs deep dull red."—*Latham.* A variety is mentioned in the following words: "Beak black: forehead white, the rest of the crown (head?) tinged with blue; with dusky streaks before, and dusky black behind the eye, communicating with the nape and neck adjoining, which are of the same colour: under parts, from the chin, white; wings and tail fine pale grey; the second quills marked with brown at the ends and middle: back greyish-ash colour, marked with large spots of

dusky, pointed at the back part; tail moderately forked: legs dusky red. Called Peteysee Tehary."

WHITE-WINGED VIRALVE.

(Viralva leucoptera.)

Vi. *capite, collo, pectore ventreque nigris; scapulariis cinereo atris; uropygio caudâque albis; tectricibus majoribus, remigibusque secundariis cærulescente-cinereis, rostro pedibusque rubris.*

Viralve with the head, neck, breast, and belly black, the scapulars dark-ash: the rump and tail white; the greater coverts and secondary quills bluish-ash; the beak and legs red.

Sterna leucoptera. *Temm. man. d'Orn.* 483. *Id.* 2 *Edit.* ii. 747.

Hirondelle de mer leucoptère. *Ibid.*

White-winged Tern. *Lath. Gen. Hist.* x. 127.

Length about ten inches: the beak and legs are of a fine coral red: the head, neck, top of the back, breast, belly, inner wing-coverts, and abdomen are of a deep black: the lower part of the back and scapulars are ashy-black: the lesser and middle wing-coverts, the rump, the tail-feathers, and its coverts are pure white: the greater wing-coverts and secondary quills are bluish-ash: on the inner webs of the two first quills is a broad longitudinal band of pure white: the irides are black. The young of the year have the white on the wings less pure, and more shaded with ash-colour: the tail-feathers are ash-coloured: the point of the beak is blackish: the black

on the plumage is tinted with cinereous: the forehead is clear ash: and all the feathers on the upper parts are more or less tipped with whitish-ash.

This species inhabits the borders of the Mediterranean; the lakes, rivers, and marshy countries in the vicinity of the Alps: it is very common in the lakes of Lucerne, Lugano, and Como; and sometimes appears on that of Geneva. It feeds on insects and aquatic vermes: its eggs are unknown.

MUSTACHOE VIRALVE.

(Viralva leucopareia.)

VI. *cærulescente-cinerea; fronte, vertice, occipite, nuchâque nigris; capitis collique lateribus albis; rostro pedibusque rubris.*

Bluish-ash Viralve with the forehead, crown, occiput, and nape black; the sides of the head and neck white; the beak and legs red.

Hirondelle de mer Moustache. (Sterna leucopareia.) *Temm. man. d'Orn. 2 Edit.* ii. 746.

Sterna Delamotta. *Vieil. Enc. Meth. p.* 350.

Mustachoe Tern. *Lath. Gen. Hist.* x. 110.

LENGTH eleven inches: beak and legs deep red: irides black: the forehead, top of the head, and nape, the neck, and all the under parts clear white: behind the eyes a black spot: the back, wings, quills, and tail ashy-grey: this is the winter plumage. In summer the head is, as it were, enveloped in a black hood, which encompasses the eyes, and passes down to the

nape: below the eyes is a large patch of white, resembling a mustachoe, which reaches to the ears: the throat is ashy-white, and this colour prevails over the under parts, becoming deeper on the belly and sides: the upper parts, the wings, and tail are deep ash. The young have a mixture of brown on the crown, and about the eyes and ears dusky-ash: the upper parts are mixed with brown and yellowish: the beak is brown with a reddish base: the legs flesh-colour.

Common in the great marshes of the south-east of Europe, and found also in Hungary, Germany, and France, the coasts of Istria and Dalmatia. It feeds on aquatic vermes and insects, but not on fish.

SIMPLE VIRALVE.

(Viralva simplex.)

VI. *plumbescens subtus alba, vertice albido, tectricibus alarum mediis majoribusque albis.*

Plumbeous Viralve beneath white, with the crown whitish, the middle and greater wing-coverts white.

Sterna simplex. *Gmel. Syst. Nat.* 1. 606. *Lath. Ind. Orn.* 2. 805.

Simple Tern. *Lath. Gen. Syn.* 6. 355. *Lath. Gen. Hist.* x. 111.

INHABITS Cayenne. Length fifteen inches: beak stout and reddish: the crown of the head is whitish: the upper parts of the neck and back are pale lead-colour; the under parts are white: behind each eye

is a black spot: the lesser wing-coverts, scapulars, and tail are pale plumbeous: the middle and greater coverts are white, with the edges of some of the latter brown: the quills are black, and the tail is but little forked: the legs are red.

CHINESE VIRALVE.

(Viralva Sinensis.)

Vi. *alba dorso cinereo, alis caudâque griseo-canis, fasciâ verticali nigrâ.*

White Viralve with the back ash-coloured, the wings and tail hoary-grey, and a vertical black band.

Sterna Sinensis. *Gmel. Syst. Nat.* 1. 608. *Lath. Ind. Orn.* 2. 809.

Chinese Tern. *Lath. Gen. Syn.* 6. 365. *Lath. Gen. Hist.* x. 125.

"LENGTH eight inches: beak black; one inch and a quarter in length, and moderately stout: nostrils pervious: head, neck, rump, and under parts white: across the top of the head dusky-black, taking in the eye on each side, and passing downwards in a point at the nape of the neck: back cinereous: some of the feathers edged with pale tawny: wing-coverts fine pale ash-colour, dashed down the middle of each shaft with dusky: quills fine cinereous-grey: tail short, very little forked, paler than the quills: legs slender, orange: claws crooked and black. Inhabits China."—*Latham.*

GULL-BILLED VIRALVE?

(Viralva? Anglica.)

Vi.? *vertice colloque suprà nigris; corpore suprà cærulescente-cinereo, subtus niveo; remigibus primariis apice cinereo-fuscis; rostro pedibusque nigris.*

Viralve with the crown and neck above black; the body above bluish-ash, beneath snowy; the primary quills ashy-brown at the tip; the beak and legs black.

Hirondelle de mer hansel. *Temm. man. d'Orn.* 2 *Edit.* ii. 744.

Sterna aranea, or Marsh Tern. *Wils. Amer. Orn.* viii. 143. *pl.* lxxii. *f.* 6?

Marsh Tern. *Lath. Gen. Hist.* x. 111?

Gull-billed Tern. (Sterna Anglica.) *Mont. Orn. Dict. and Supp. with fig. Lath. Gen. Hist.* x. 112.

This bird greatly resembles Sterna Cantiaca: it is of the same size as that bird: its beak is about an inch and a half long, thick, strong, and angulated on the under mandible like that of a Gull; it is wholly black: the upper part of the head, taking in the eyes, is black, and extends far down the back of the head and part of the neck; sometimes there are a few white feathers on the crown: the general colour of the plumage of the upper parts of the body is cinereous; the tail and its upper coverts are similar to the back, but the outer feather on each side is white: the quills are hoary, with the tips of the first five spotted black, for upwards of an inch: in other respects the wings are similar to those of Sterna Cantiaca, except that part of the inner webs which is white, does not quite reach the margin, the very edge

being dusky for half the length of the feathers: the legs are rufous-black.

This species is found on the British coasts, and on those of Kent and Sussex only; in the vicinity of Sandwich and Rye: it also frequents Hungary and the confines of Turkey, and if it be the Marsh Tern of Wilson (which is highly probable) it also inhabits the United States of America and Brazil. It affects those marshes that are well clothed with rushes, and are in the vicinity of great lakes, rarely appearing on the sea or its coasts: it feeds on large insects, such as dragon-flies and moths, which it seizes while flying. According to Wilson it lays three or four olive-green eggs, spotted with brown. As before mentioned, it resembles Sterna Cantiaca, but may be readily distinguished from that bird by its beak, wings, and tail.

JAVAN VIRALVE?

(Viralva? affinis.)

Vi? *alba dorso tectricibusque plumbeo-griseis, remigibus canis internè subfuscescantibus.*

White Viralve? with the back and coverts grey-lead colour, the quills hoary, internally brownish.

Sterna affinis. *Horsfield, Linn. Trans. v.* xiii. *p.* 199.

Inhabits Java: white: the back and wing-coverts greyish lead colour: quills hoary, within brownish. Much allied to the preceding.

DIVISION II.

Rostrum *rectum, apice adunco.*
Beak straight, its tip bent down.

XEMA. XEME.

Generic Character.

Rostrum breve, subgracile, rectum, lateratim compressum, apice adunco: mandibulâ inferiore subtus subangulatâ.
Nares gracillimi, lineares.
Pedes graciles; *tibiæ* parte inferiore nudæ.
Cauda forficata.

Beak short, slender, straight, laterally compressed, its tip bent down; the lower mandible somewhat angulated beneath.
Nostrils very slender, linear.
Legs slender; *tibiæ* naked on the lower part.
Tail forked.

XEMA. Leach.
LARUS. Sabine, Temm.

THE forked tail at once distinguishes this genus from the rest of the Gulls, from which it also differs in its more slender and Tern-like appearance; its beak and legs are much weaker than those of the Gulls, and the former is much more feathered at its base than that of the Gulls; and the tibiæ have their lower parts, just above the knee, naked.



SABINES' XEME.

SABINE'S XEME.

(Xema Sabini.)

Xe. *albidus capite nigricante, torque cervicali nigro, rostro basi nigro, apice luteo, pedibus nigris.*

Whitish Xeme with the head dusky, the neck with a black collar, the base of the beak black, the tip luteous, the legs black.

Xema Sabini. *Leach. Ross's Voy. App. p.* lvi.

Larus Sabini. *Sabine. Linn. Trans.* xii. 520. *pl.* 29.

Larus collaris.

Fork-tailed Gull. *Lath. Gen. Hist.* x. 142.

This interesting bird was discovered during the first expedition in search of a north-west passage, and is thus accurately described by Mr. Sabine, in the Linnean Transactions above cited: "The male and female are nearly the same size; the latter is rather the smallest, but their plumage is exactly similar. The length of different specimens varies from twelve and a half to fourteen inches; the extent of the wings is about thirty-three inches, and the weight from six and a half to seven and a half ounces. The beak is one inch long, the base of both mandibles black as far as the angular projection of the lower mandible, the remainder yellow; the inside of the mouth bright vermilion: the irides dark, surrounded by a naked circle of the same colour as the inside of the mouth; a small white speck beneath the eye, scarcely perceptible: the whole of the head and upper part of the neck a very dark ash or lead-colour; the remainder of the neck behind and before, as well as

the breast and belly, pure white; a narrow black collar surrounds the neck at the meeting of the ash-colour and of the white: the back, scapulars, and wing-coverts are ash-coloured, very much lighter than the head, but darker than the corresponding parts of the *Larus ridibundus:* the lower ends of the scapulars are tipped with white: the first five primary quill-feathers with black shafts, the whole outer webs of them black, the edge of their upper webs white to within an inch and a half of the tips, the white sometimes continued to the tip; the tips of the third, fourth, and fifth white, giving the wing, when closed, a spotted appearance; the sixth primary quill-feather with a white shaft, having the web more or less black, but principally white, with sometimes a black spot near the end; the other primaries, the secondaries, and the tertials white; the whole under parts of the wings white. The wings extend an inch or more beyond the longest feathers of the tail. The legs, feet, and claws black; the thigh feathered to within three-eighths of an inch of the knee; the length of the tarse one inch and a half; the length of the front toes about an inch, the inner one the shortest; the hinder toe small, and placed high. The tail, with its upper and under coverts, white; the tail-feathers twelve, the outer narrower than the centre ones; the outer tail-feathers about five inches long, the others in succession gradually shortening, so that the whole tail becomes forked by a diminution of nearly an inch."

He adds, that it lays two olive-coloured eggs, blotched with brown, on the bare ground, which it hatches the last week in July: the young, when

first produced, are mottled with brown and dull yellow. Little is known of the manners of these birds, but they fly with impetuosity towards persons approaching their nests and young; and when one bird of a pair was killed, its mate, though frequently fired at, continued on wing close to the spot where it lay. They procure their food on the sea-beach, standing near the water's edge, and picking up the marine insects which are cast on shore.

RISSA. KITTIWAKE.

Generic Character.

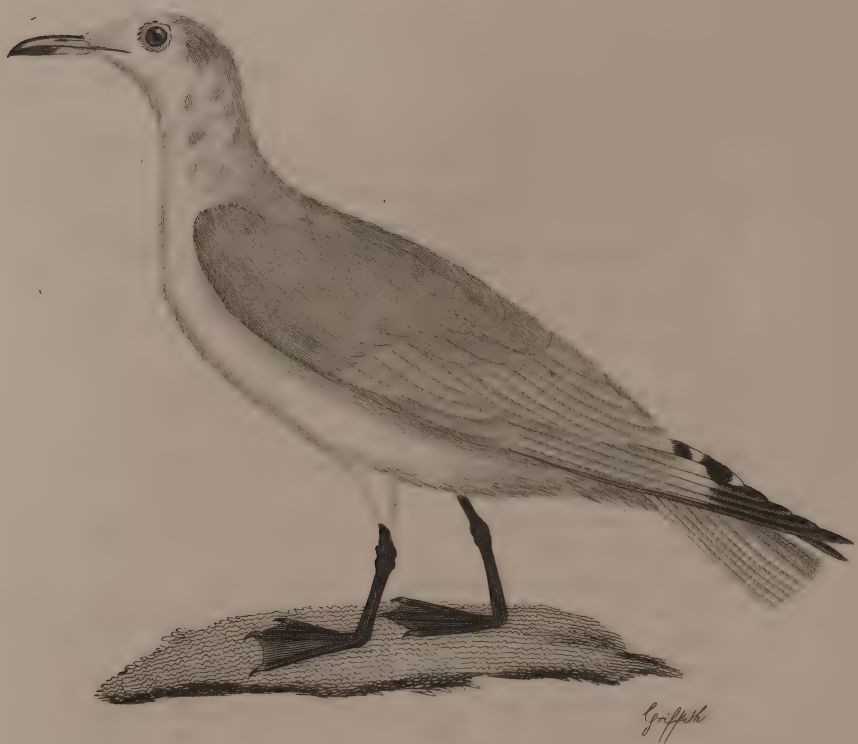
Rostrum mediocre rectum, lateratim compressum, apice adunco; mandibulâ inferiore subtus angulatâ.
Nares lineares, rectæ, in medio rostri sitæ.

Cauda subfurcata.
Pedes tetradactyli; *pollex* ferè obliteratus, exunguiculatus.

Beak moderate, straight, laterally compressed, its tip bent down; the lower mandible angulated beneath.
Nostrils linear, straight, placed in the middle of the beak.
Tail slightly forked.
Legs four-toed; the *hinder toe* nearly obliterated, and without a *claw*.

RISSA. Leach.
LARUS. Linn., Gmel., Lath.
GAVIA. Briss.

THE Kittiwake differs from the Xemes by reason of the absence of the hinder toe, and from the Gulls by the same character, added to the subfurcate tail. There is but one species known, which prefers the inland lakes to the sea-coasts.



BRUNNICK'S KITTIWAKE.

BRUNNICH'S KITTIWAKE.

(Rissa Brunnichii.)

Ri. *dorso canescente, rectricibus albis; his,* in junioribus, *apicibus, excepto externo, nigris.*

Kittiwake with the back hoary, the quills white; *in the young* the latter, except the outer one, are tipped with black.

Rissa Brunnichii. *Leach, in Brit. Mus. Collection.*

Larus tridactylus. *Lath. Ind. Orn.* 2. 817.

Mouette tridactyle. *Temm. man. d'Orn.* 502. *Id.* 2 *Edit.* ii. 774.

Summer Plumage.—Larus Rissa. *Linn. Syst. Nat.* 1. 224. *Gmel. Syst. Nat.* 1. 594.

Kittiwake. *Lath. Gen. Syn.* 6. 393. *Lew. Brit. Birds,* 6. *pl.* 213. *Walc. Syn.* 1. *pl.* 108. *Mont. Orn. Dict.* 1. *and Sup. Bew. Brit. Birds,* 2. 229. *Lath. Gen. Hist.* x. 157.

Winter Plumage.—La Mouette cendreè. *Briss. Orn.* 6. 175. *pl.* 16. *f.* 1.

Young.—Larus tridactylus. *Linn. Syst. Nat.* 1. 224. *Gmel. Syst. Nat.* 1. 595.

Gavia cinerea nævia. *Briss. Orn.* 6. 185. *pl.* 17. *f.* 2.

La Mouette cendrée tachetée. *Buff. Hist. Nat. Ois.* 8. 424. *Buff. Pl. Enl.* 387.

Tarrock Gull. *Penn. Arct. Zool.* 2. 533. *Penn. Brit. Zool.* 2. 251. *Lath. Gen. Syn.* 6. 392. *Lath. Syn. Sup.* 268. *Lew. Brit. Birds,* 6. *pl.* 213. *Walc. Syn.* 1. *pl.* 109. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 231.

Kittiwake Gull. *Penn. Arct. Zool.* 2. 456.

The length of this species is about fifteen inches; and in its winter plumage it answers to the following description: its beak is of a yellowish-green; the mouth and circuit round the eyes are bright red:

its irides are brown: the top of the head, the occiput, nape, and a portion of the sides of the neck, are of an uniform bluish-ash colour, with very slender black lines before the eyes: the forehead, space round the eyes, all the under parts, the rump, and the tail are pure white: the back, wings, and quills are of a clear ashy-blue: the outer quill is bordered throughout its length with black; the four outer are tipped with the same, the three inner of which have towards their tip a very small white spot, and the fifth quill has a black band towards its extremity, which is terminated with a white space: the legs are brown, or deep olivaceous. In the summer it has the whole of the head and the neck of a perfect white, without any tinge of ashy-blue on its nape, or the fine black rays before the eyes; in other respects it resembles the winter state. During its earliest existence it has the head, neck, and all the under parts whitish, marked before the eyes with a black cross, and on the region of the ears with a very deep ashy-blue spot; towards the occiput is a black spot; and on the nape is a broad dusky or blackish mark: the feathers on the upper parts of the back and of the wings are of an ashy-blue strongly tipped with brown-black, and the bend of the upper part of the wings black: on the scapulars and secondary quills are several deep dusky spots: the quills are black: the tail-feathers are black towards the tip, and tipped with whitish; their outer one is white: the beak, irides, and circuit round the eyes are black. After the first moult in the autumn the back becomes of an ashy-blue colour, often varied with several feathers spotted with brown: the spots

in front and behind the eyes, as well as the dark feathers near the ears and on the nape, become of a deep ashy-blue: the wings still retain the black and brown spot: the tail is black towards its tip: the beak is of a yellowish-green, and all the under parts are pure white.

This species affects the stagnant lakes, or interior seas and gulfs, in preference to the borders of the ocean itself: it proceeds to the southward in the autumn and remains till the spring, when they retire to the regions of the Arctic Circle to breed, building in the rocky crags of the bays: in June it lays two or three eggs of a greenish-ash colour, spotted with brown. During the period of incubation the parents are very noisy. They feed on fishes, their fry, and insects: swim well; and are often found at a distance from land on floating masses of ice.

LARUS. GULL.

Generic Character.

Rostrum rectum, compressum, mediocre, integrum, apice adunco; mandibulâ inferiore infrà versus apicem gibbâ et angulatâ.	*Beak* straight, compressed, moderate, entire, its tip hooked; the lower mandible beneath gibbous and angulated near the tip.
Nares lineares, rectæ, in medio rostri sitæ.	*Nostrils* linear, straight, placed in the middle of the beak.
Pedes tetradactyli; *pollex* brevis à terra elevata.	*Legs* four-toed; the *hinder toe* short, not touching the ground.
Cauda haud furcata.	*Tail* not forked.

LARUS Auctorum.

GULLS are voracious and cowardly birds, which swarm on the sea-coasts, although some are found also on the margins of fresh-water lakes and rivers: their food consists indifferently of living or dead fishes, their fry, or carrion. They endure the most severe tempests, flying almost continually; but when at rest often repose on the surface of the sea, in preference to that of its coasts. The sexes resemble

each other; excepting that the female is rather smallest: the young differ much from the old, and do not obtain their perfect plumage till the second or third year, which causes great difficulty in ascertaining and describing the species; the characters by which the adult birds may be known are, the white on the tail being without spots or black bands, and the beak being destitute of black spots. Until the third year the young live in small flocks detached from the old. The appearance of Gulls far inland is generally indicative of approaching severe weather or storms.

GREAT GULL?

(Larus? icthyætus.)

La.? *capite colloque supremo nigris, dorso alisque grisescentibus, remigibus primoribus albis, exterioribus quinque apice nigris.*

Gull? with the head and neck above black, the back and wings greyish, the primary quills white, the five outer ones with black tips.

Larus icthyætus. *Pallas. Gmel. Syst. Nat.* 1. 599. *Lath. Ind. Orn.* 2. 811.

Great Gull. *Lath. Gen. Syn.* 6. 370. *Lath. Gen. Hist.* x. 132.

Misamichus Pallasii. *Leach, MSS.?*

Mauve. *Temm. man. d'Orn.* 2 *Edit. Anal. p.* cviii.

As large, or larger than the Barnacle Goose: its beaky is dusk yellow at the base, and crimson towards the tip, with the tip itself yellow; and a dusky-brown spot near it: irides brown: the eyelids white:

the head and half the neck black: the back and rump pale grey: the greater quills white, the five first with black tips; the secondaries dark grey: the tail white: the legs dark reddish-brown.

This very singular bird inhabits the borders of the Caspian Sea: it lays its eggs on the bare sand; they are of an oblong shape, marked with spots of brown and a few paler tinges: it flies somewhat like a Raven, and, like that bird, has a very hoarse cry.

GREAT BLACK-BACKED GULL.

(Larus marinus.)

La. *albus dorso nigro, pedibus albis.*
White Gull with the back black, the legs white.
Larus marinus. *Linn. Syst. Nat.* 1. 225. *Gmel. Syst. Nat.* 1. 598. *Lath. Ind. Orn.* 2. 813. *Brun. Orn. Boreal.* 145. *Sabine. Linn. Trans.* xii. 543.
Larus niger. *Briss. Orn.* 6. 158.
Larus maximus ex albo et nigro varius. *Raii Syn.* 127. *A.*
Le Goéland noir. *Buff. Hist. Nat. Ois.* 405. *pl.* 31. *Buff. Pl. Enl.* 990.
Goéland à manteau noir. *Temm. man. d'Orn.* 490. *Id.* 2 *Edit.* ii. 760. *Cuv. Reg. Anim.* 1. 519.
Great Black and White Gull. *Alb. Birds,* 3. *pl.* 94.
Black-backed Gull. *Penn. Brit. Zool.* 2. 242. *Penn. Arct. Zool.* 2. 451. *Lath. Gen. Syn.* 6. 371. *Lew. Brit. Birds,* 6. *pl.* 208. *Walc. Syn. pl.* 112. *Bew. Brit. Birds,* 2. 212. *Linn. Trans.* v. viii. 267. *Lath. Gen. Hist.* x. 145.
Great Black-backed Gull. *Mont. Orn. Dict.* 1. *and App.*
Young.—Larus nævius. *Gmel. Syst. Nat.* 1. 598.
Larus marinus γ. *Lath. Ind. Orn.* 2. 814.

Larus varius. *Briss. Orn.* 6. 167. *pl.* 15.
Wagellus Cornubiensum. *Raii Syn.* 130. *A.*
Le Goéland varié ou Grisard. *Buff. Hist. Nat. Ois.* 8. 413. *Buff. Pl. Enl.* 266.
Wagel Gull. *Penn. Brit. Zool.* 2. 247. *A. Penn. Arct. Zool.* 2. 433. *Lath. Gen. Syn.* 6. 375. *Lew. Brit. Birds,* 6. *pl.* 209. *Walc. Syn.* 1. *pl.* 111. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 216. *Linn. Trans,* v. xii. 547.

This is the largest of the Gulls, being nearly thirty inches in length: in its winter plumage it has its beak of a yellowish-white colour, with the angle of its lower mandible bright red: the orbits are orange, and the irides bright yellow: the top of its head, space round the eyes, the occiput, and nape, white; each feather having a longitudinal stripe of bright brown down its shaft: the forehead, throat, neck, all the under parts of the body, and of the back, and the tail, of a clear white: the top of the back, scapulârs, and wings of a deep black, apparently shaded with bluish: the quills towards their tips are very deep black, and are tipped with white; the secondaries and scapulars are also tipped with white: the legs are dull whitish. The summer dress differs from the above in having the top of the head, the space round the eyes, the occiput, and nape of a pure white, without any brown spots. The young of the first year have the head and the fore part of the neck of a greyish-white, thickly sprinkled with brown spots, especially on the neck: the feathers on the upper part of the plumage are dusky-brown in the middle, bordered and tipped with reddish white; which colour is formed into transverse bands on the wing-coverts: the under parts are of a dull griseous, striped with broad zigzags, and spots

of brown: the middle tail-feathers are dusky; the lateral ones are black towards the tip; and all of them are edged and tipped with whitish: the quills are dusky, with a small white tip: the beak is deep black: the irides and circle of the eyes are brown: the legs are livid. After the first year the feathers on the upper parts are deeply bordered with white, which colour predominates on all the under parts, and the spots and lines thereon become fainter: the head also becomes of a pure white, and the point of the beak is tinged with a livid hue. In the next moult the shoulders become dusky-black, varied with irregular spots of brown and grey; the white on the plumage becomes of a purer tinge, and is slightly spotted with a few clear spots; the tail is ornamented with black variations; and the beak receives its red base, with its black middle, and livid yellow tip, spotted with black. At the third moult, in the autumn, the plumage is complete. The young vary in having all the plumage of a whitish-grey, more or less spotted with brown; and in having the quills whitish.

This species prefers the sea-shores, rather than the ocean; it is abundant in all the northern parts of Europe, the coasts of Greenland, and of those of the Orcades and Hebridal Islands, and of the north of England; but on the latter they are in less abundance: they breed on the highest cliffs which overhang the sea: their eggs are three or four in number, of a dark-olive colour, marked at their thicker end with several large and small spots of dusky-brown. They feed on the smaller fishes and their fry, carrion, and sometimes on the inhabitants of bivalve shells.

Their cry is very hoarse and disagreeable, resembling the loud cackling of a Goose.

GLAUCOUS GULL.

(Larus glaucus.)

La. *albus dorso alisque canis, remigibus apice albis, rachidibus albis, pedibus lividis.*

White Gull with the back and wings hoary, the quills with white tips and shafts, the legs livid.

Larus glaucus. *Gmel. Syst. Nat.* 1. 600. *Brun. Orn. Bor.* 148. *Lath. Ind. Orn.* 2. 814. *Sabine. Linn. Trans.* xii. 543. *Ross's Voy. App. p.* liv. *Parry's Voy. App. p.* cciii.

Le Bourgmestre. *Buff. Hist. Nat. Ois.* 8. 418.

Burgomeister. *Raii Syn.* 127.

Glaucous Gull. *Penn. Arct. Zool.* 2. 532. *B. Lath. Gen. Syn.* 6. 374. *Lath. Gen. Hist.* x. 148.

Captain Sabine, in the work quoted above, gives the following descriptions of the three states of this species: "In immature plumage it is mottled throughout with an uniform light brown and white, being distinguished from the young of other well-described species by being without the darker marks on the wings and tail: during the first year the beak has the upper mandible less arched, the angular projection of the lower mandible not so defined, and the extremities of both lead-coloured. In winter the mature bird has the head and neck mottled with brown,

as in other Gulls. In the perfect summer state the whole plumage is white, excepting the back, scapulars, and wing-coverts, which are a very light ash-colour: the primary quill-feathers are still lighter, the ends and under part being pure white: there is no black whatsoever on any part of the plumage. When arrived at maturity the beak is three inches in length, of a lightish horn-colour, the angular projection of the lower mandible being bright red; orbits naked, straw-coloured, and very fierce; legs and feet a livid flesh colour."

Inhabits the northern parts of Europe and Greenland, and, according to Captain Sabine, also on the British coasts. Like the rest of this genus it feeds upon fish, and also on the smaller aquatic birds. Captain S. observes, that one specimen which was killed during the north-western expedition disgorged a little Auk when it was struck, and proved, on dissection, to have a second in its stomach. Its eggs are greenish, elongated at the tip, and marked with six or eight black spots.

SILVERY GULL.

(Larus argentatus.)

La. *albus, dorso alisque canis, remigibus primoribus versus apicem nigris, rachidibus nigricantibus, pedibus lividis.*

White Gull with the back and wings hoary, the primary quills black towards the tip, with dusky shafts, the legs livid.

Larus argentatus. *Sabine. Linn. Trans.* xii. 546. *Temm. man. d'Orn.* 2 *Edit.* 2. 764.

Larus glaucus. *Temm. man. d'Orn.* 493.

Larus griseus. *Briss. Orn.* 6. 162.

Le Goèland à manteau gris. *Buff. Hist. Nat. Ois.* 8. 640. *pl.* 32. (hind toe omitted.)

Herring Gull. *Penn. Brit. Zool.* 2. 246. *pl.* 88. *Penn. Arct. Zool.* 2. 452. *Lath. Gen. Syn.* 6. 372. *Lew. Brit. Birds,* 6. *pl.* 7. *Walc. Syn.* 1. *pl.* 113. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 214. *Lath. Gen. Hist.* x. 150.

Summer Plumage.—Larus fuscus. *Gmel. Syst. Nat.* 1. 599. *Brun. Orn. Boreal.* 142.

Herring Gull. *Penn. Arct. Zool.* 2. 527.

Winter Plumage.—Larus argentatus. *Gmel. Syst. Nat.* 1. 600. *Brun. Orn. Boreal.* 149.

Larus marinus β. *Lath. Ind. Orn.* 2. 814.

Gavia cinerea major. *Briss. Orn.* 6. 182.

Le grande Mouette cendrée. *Buff. Hist. Nat. Ois.* 8. 428. *Buff. Pl. Enl.* 977.

Silvery Gull. *Penn. Arct. Zool.* 2. 533. *C. Lath. Gen. Syn.* 6. 375. *Lath. Gen. Hist.* x. 151.

Immature.—Larus varius. *Brun. Orn. Bor. no.* 150.

Wagel. *Penn. Arct. Zool. Sup.* 70.

Iceland Gull. *Wern. Trans.* iv. *pt.* 1. *p.* 176? *Lath. Gen. Hist.* x. 147?

About two feet in length; the female rather less: during the winter they have the beak of a yellow-

ochre tinge, with the angle of the lower mandible of a bright red: the border of the eyes and the irides bright yellow: the top of the head, the space round the eyes, the occiput, nape, and sides of the neck white; with a longitudinal brown stripe down the middle of each feather: the forehead, throat, and all the under parts, the back, and the tail, are clear white: the top of the back, scapulars, the wings, and the quills are of a pure bluish-ash; the quills being black towards their tips, and marked with a white space at the tips; the secondaries and scapulars are also tipped with white: the legs are of a livid flesh-colour. The young have the head, neck, and all the under parts of a deep griseous, varied with numerous brown spots: the feathers on the upper parts are clear brown in the middle, and are all edged with a straight yellowish band: the tail-feathers are brownish, with their base white and their tips yellowish: the quills are dusky-brown, delicately tipped with white: the beak is dusky-brown: the irides and naked circle brown: the legs livid-brown. After the first year the colours become paler, and the white predominates. After the autumnal moult of the second year the plumage receives a bluish-ash tinge, and becomes marked with several clear grey spots: in the following spring the ashy-blue on the shoulders appears more strongly, and in the succeeding autumn the perfect winter state is completed. The summer dress differs from that of the winter but little; at this time the top of the head, space round the eyes, the occiput, and the neck are pure spotless white; the rest of the plumage as in the winter.

Frequent in several parts of Europe, especially on the coasts of Holland and England, and apparently more abundant in lower latitudes than the preceding species; it is found, however, in Sweden, Norway, and Greenland. It often appears inland, in the direction of great lakes or rivers, and lays its eggs on the downs or naked rocks; they are of a deep olive colour, with several spots of black and ash, and are three or four in number.

This species feeds, like its congeners, on fish, worms, insects, &c. Montagu relates of one which he had alive upwards of thirteen years, and in which he observed all the varieties of plumage as above noticed, that when the weather was mild and the ground moist, it was amusing to observe its method of catching worms, which it performed by a perpetual trampling upon the same spot, turning about in all directions, and eagerly examining for those that rose out of the ground, which were instantly seized, and the operation of trampling recommenced. In the summer it used to catch chaffers and dorbeetles. At four years old it began to utter a piercing and inharmonious cry in the spring.

LESSER BLACK-BACKED GULL.

(Larus fuscus.)

La. *albus dorso fusco, pedibus flavis.*
White Gull with a brown back and yellow legs.
Larus fuscus. *Linn. Syst. Nat.* 1. 225. *Lath. Ind. Orn.* 2. 815.
Goéland à pieds jaunes. *Temm. man. d'Orn.* 496. *Id.* 2 *Edit.* ii. 767.
Gavia grisea. *Briss. Orn.* 6. 171.
Lesser Black-backed Gull. *Mont. Orn. Dict.* 1. *and Supp.*

This bird is about twenty inches in length; in its winter state its beak is a citron-colour; with the angle of the lower mandible, the irides and circle of the eyes very clear yellow: the top of the head, space round the eyes, occiput, nape, and sides of the neck white; each feather marked down its middle with a longitudinal brown stripe: the forehead, throat, the rest of the under parts, the back, and tail pure white: the top of the back, scapulars, the wings, and quills deep black, slightly shaded with bluish: towards the tip of the two outer quills is an oval white spot, and their tip is black; the rest of the quills have a fine white tip: the secondaries and scapulars are also tipped with white: the legs are clear yellow. The young have the throat and fore part of the neck whitish, striped with clear brown: the neck and under parts are whitish, thickly marked with large deep brown spots: the feathers of the upper parts and of the wings are dusky-brown in the middle, and edged with a straight band of yellowish: the tail-feathers

are clear grey marbled with black at their base, and the rest of them are deep dusky tipped with white: the quills are deep black and spotless: the beak is black, with its base brown: the legs are dull yellow-ochre. During its summer state it has the top of the head, the space round the eyes, the occiput, and the neck of a pure unspotted white; the rest of the plumage as in the winter.

This species chiefly resides on the shores of the Mediterranean and of the Baltic: it is found, nevertheless, on some of the British coasts, Montagu having observed and captured them on Ramsey Island, in Pembrokeshire, where, he says, they breed in abundance. They lay two or three eggs, grey-brown, spotted with black.

IVORY GULL.

(Larus eburneus.)

La. *corpore toto niveo, pedibus nigris, rostro plumbeo apice pallido.* Gull with the entire body snowy, the legs black, the beak lead-colour, with its tip pale.

Larus eburneus. *Gmel. Syst. Nat.* 1. 596. *Lath. Ind. Orn.* 2. 816. *Sabine. Linn. Trans.* xii. 548.

Larus candidus. *Fabr. Faun. Græn.* 67. 103.

La Mouette blanche. *Buff. Hist. Nat. Ois.* 8. 422. *Buff. Pl. Enl.* 994. *Temm. man. d'Orn.* 498. *Id.* 2 *Edit.* ii. 769.

Senator. *Raii Syn.* 126.

Ivory Gull. *Penn. Arct. Zool.* 2. 457. *Lath. Gen. Syn.* 6. 377. *Lath. Gen. Hist.* x. 156.

This beautiful species, in the mature state, has its beak lead-coloured at its base, and of a yellow-ochre colour at its tip: its entire plumage is pure spotless snowy-white: the legs are greyish-black, and the skin very rough: they are feathered within a very short distance of the knee: claws black: its length about twenty inches. The young have the plumage mottled with brown about the head and wings, and the quills and tail-feathers are tipped with brown.

This bird inhabits the coasts of Greenland and Spitzbergen, and is found at a distance from land, which it is said rarely to visit except for the purpose of incubation. Very little is known of its manners: it appears to be fond of whale blubber, which attracts great numbers.

CRIMSON-BILLED GULL.

(Larus Novæ Hollandiæ.)

La. *albus, dorso alisque argenteo-griseis, rostro pedibusque coccineis.*

White Gull with the back and wings silvery grey, the beak and legs crimson.

Crimson-billed Gull. *Lath. Gen. Hist.* x. 145.

"Length seventeen or eighteen inches: beak from gape to point two inches, colour crimson: irides yellow-hazel; eyelids dotted with crimson: head, neck, and under parts of the body white: back and wings pale silvery grey: outer border of the wings white; some of the greater quills chiefly white, but two or

three of the outer for the greater part black; all of them are white near the ends, for an inch or more, and some of the tips are black; these are so long as to reach an inch beyond the end of the tail, which is white: legs crimson: webs and toes the same, but of the former rather darker: claws black. Inhabits New Holland; not unfrequent at New South Wales, most so in April."—*Latham.*

ADRIATIC GULL.

(Larus melanocephalus.)

La. *albus dorso cinereo, remigibus omnibus apice albis.*
White Gull with the back ash-coloured, all the quills white at the tip.
Larus melanocephalus. Mouette ou capuchon noir. *Temm. man. d'Orn. 2 Edit.* ii. 777.
Adriatic Gull. *Lath. Gen. Hist.* x. 144.

Common on the coasts of the Adriatic Sea and Dalmatia. Length sixteen inches: beak rather short, strong, and of a vermilion colour: irides and round the eyes brown: the head, neck, upper parts, tail, and quills, from the middle to the ends, white: back, wings, second quills, and base of the greater, light bluish-ash: legs light orange. In the summer the head and upper part of the neck are deep black; the fore part of the neck and belly are rose-colour, which disappears soon after the death of the bird. The young have the plumage mixed with deep brown;

and the white of the head and outer edge of all the quills deep black, but the inner webs and ends white; at the end of the tail a black band.

COMMON GULL.

(Larus canus.)

La. *albus dorso cano vel cinereo, rostro cæruleo-viridis apice pallido.*

White Gull with the back hoary or ash-coloured, the beak blue-green, its tip pale.

Larus canus. *Linn. Syst. Nat.* 1. 224. *Gmel. Syst. Nat.* 1. 596. *Lath. Ind. Orn.* 2. 815.

Gavia cinerea. *Briss. Orn.* 6. 175. *pl.* 16. *f.* 1.

Larus cinereus minor. *Raii Syn.* 127. *A.*

Mouette à pieds bleus. *Temm. man. d'Orn.* 499. *Id.* 2 *Edit.* ii. 771.

White Web-footed Gull. *Alb. Birds,* 2. *pl.* 84.

Common Gull. *Penn. Brit. Zool.* 2. 249. *pl.* 89. *Penn. Arct. Zool.* 2. 458. *Lath. Gen. Syn.* 6. 378. *Lew. Brit. Birds,* 6. *pl.* 215. *Walc. Syn.* 1. *pl.* 110. *Don. Brit. Birds,* 2. *pl.* 46. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 218. *Lath. Gen. Hist.* x. 153.

Winter Plumage.—Mouette à pieds bleus, au grande Mouette cendré. *Buff. Hist. Nat. Ois.* 8. 428. *Buff. Pl. Enl.* 977.

Gavia. *Briss. Orn.* 6. 182. *pl.* 16. *f.* 2.

Young.—Larus hybernus. *Gmel. Syst. Nat.* 1. 596.

Gavia hyberna. *Briss. Orn.* 6. 189.

Larus fuscus, seu hybernus. *Raii Syn.* 130. *A.*

Mouette d'hyver. *Buff. Hist. Nat. Ois.* 8. 437.

Winter Mew, or Coddy Moddy. *Penn. Brit. Zool.* 2. 248. *pl.* 81. *Alb. Birds,* 2. *pl.* 87. *Lath. Gen. Syn.* 6. 384. *Walc. Syn.*

1. *pl.* 114. *Lew. Brit. Birds,* 6. *pl.* 210. *Don. Brit. Birds,* 6. *pl.* 79. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 221.

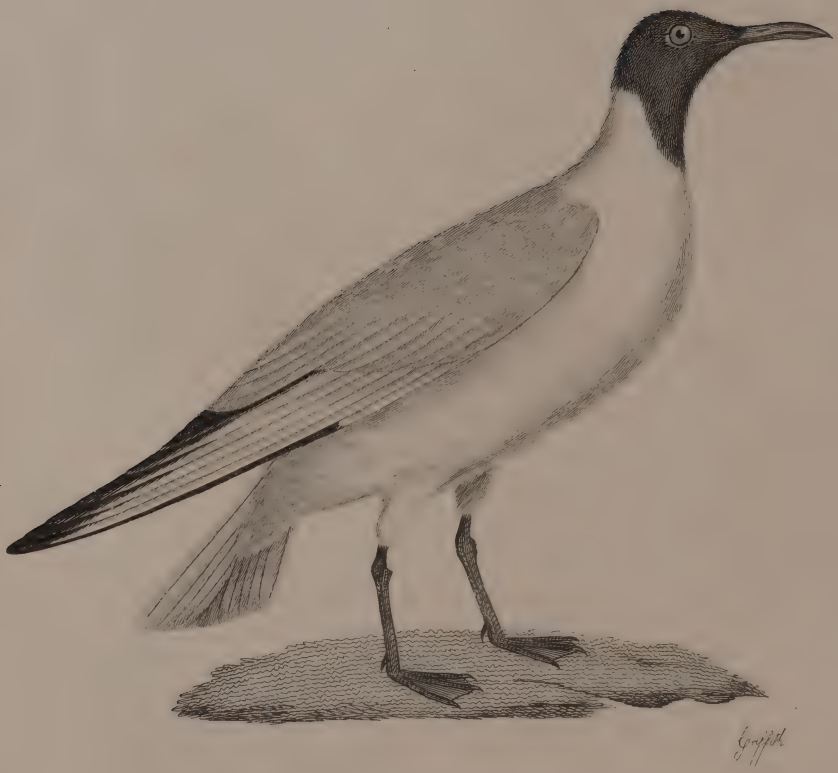
This bird, which is the commonest of the Gull tribe, at least in this part of the world, is in length about seventeen inches, and in its winter plumage has the beak yellowish-green at its base, and yellow-ochre at its point: its mouth is orange: irides brown; orbits naked and red: the head, occiput, nape, and sides of the neck white, sprinkled with numerous dusky-brown spots: the throat, all the under parts, rump, and tail are pure white: the back, scapulars, and wings are pure bluish-ash: the quills are deep black towards the tip, and the two outer ones have a long white space; they are all, as well as the scapulars and secondaries, tipped with white: the legs are ashy-blue spotted with yellow. The young have all the upper parts of a grey-brown: the feathers of the back and of the wings bordered and tipped with whitish-yellow: the forehead and all the under parts are whitish, with spots and shades of clear grey on the breast and on the sides: the base of the tail is white; the rest is blackish-brown tipped with whitish: the quills are blackish-brown: the legs are livid yellowish: the beak is black: orbits and eyes brown. After the first autumnal moult the back receives several pure ashy-blue feathers, varied with others, which are brown and edged with yellow: the head is striped with brown on a white ground: the under parts become whiter, and the base of the beak is livid yellowish, with its tip dusky. After the second autumnal moult there remains but a straight brownish

band on the tail, and a little blackish-brown towards the middle of the beak. The plumage becomes perfect on the cessation of its second vernal moult. During the summer months the old birds have the head, the occiput, the nape, and the sides of the neck of a spotless and perfect white; in other respects the plumage agrees with that of the winter. It sometimes happens that the two primary quills are not tipped with white, or at least that that colour is nearly obliterated.

This species inhabits the sea-coasts, but upon the appearance of storms or hurricanes it flies in flocks into the interior of the country: it is common in most parts of Europe, and is most abundant in those latitudes during the winter months, as a great number retire to the Arctic regions in the summer.

These birds breed upon the ledges of the rocks close to the sea-shore; sometimes not far above the water. Montagu says that he saw hundreds of them sitting on their nests in an island off St. David's: their nests were made of sea-weed, and were placed near together, about fourteen feet from the beach: the eggs were two or three in number, of a dull olive-brown, blotched with dusky, and about the size of those of a Hen.

They feed on living fishes, marine mollusca, and bivalva testacea: they are often observed at the mouths of the large rivers, in numbers, picking up the animal substances which are cast on shore, or come floating down with the tide. During the spring months they will follow the plough for the sake of the worms and larva that are exposed by its operation.



RED LEGGED GULL. *Summer plumage.*

RED-LEGGED GULL.

(Larus ridibundus.)

La. *albus dorso cano, rostro pedibusque rubris.*
White Gull with the back hoary, the beak and legs red.
Larus ridibundus. *Lath. Ind. Orn.* 2. 811. *Leisler. Temm. man. d'Orn.* 504.
Black-headed Gull. *Mont. Linn. Trans.* 7. 284. *Mont. Orn. Dict. Supp. Lath. Gen. Hist.* x. 132.
Summer Plumage.—Larus ridibundus. *Linn. Syst. Nat.* 1. 225. *Gmel. Syst. Nat.* 1. 601.
Gavia ridibunda phœnicopos. *Briss. Orn.* 6. 196. 14.
Larus cinereus. *Raii Syn.* 128. *A.*
La Mouette rieuse. *Buff. Hist. Nat. Ois.* 6. 196. *Buff. Pl. Enl.* 970. *Temm. man. d'Orn.* 2 *Edit.* ii. 780.
Brown-headed Gull. *Alb. Birds,* 2. *pl.* 86.
Black-headed Gull. *Penn. Brit. Zool.* 2. 252. *Penn. Arct. Zool.* 2. 455. *Lath. Gen. Syn.* 6. 380. *Lath. Syn. Sup.* 268. *Lew. Brit. Birds,* 6. *pl.* 212. *Walc. Syn.* 1. *pl.* 115. *Mont. Orn. Dict.* 1. *Bew. Brit. Birds,* 2. 222.
Winter Plumage.—Larus cinerarius. *Gmel. Syst. Nat.* 1. 597. *Linn. Syst. Nat.* 1. 224.
Gavia cinerea minor. *Briss. Orn.* 6. 178. *pl.* 17. *f.* 1.
Larus albus major. *Raii Syn.* 129.
La petite Mouette cendré. *Buff. Hist. Nat. Ois.* 8. 430. *Buff. Pl. Enl.* 969.
Greater White Gull. *Penn. Brit. Zool.* 2. 252. *A.*
Red-legged Gull. *Lath. Gen. Syn.* 6. 381. *Mont. Orn. Dict.* 1.
Young.—Larus erythropus. *Gmel. Syst. Nat.* 1. 597.
Gavia grisea minor.—*Briss. Orn.* 6. 173.
Red-legged Gull. *Penn. Arct. Zool.* 2. 533.
Brown-headed Gull. *Lath. Gen. Syn.* 6. 383.
Variety.—Sterna obscura. *Lath. Ind. Orn.* 2. 810?
Brown Tern. *Lath. Gen. Syn.* 6. 368?
Brown Gull. *Lath. Syn. Supp.* ii. 331.

The extraordinary variations of plumage to which this bird is subject at different periods of its existence, as well as its annual changes in the adult state, have been the cause of great difference of opinion amongst naturalists as to the identity of certain specimens; but the subject has been so thoroughly investigated by our countryman Montagu, and also by Temminck, that there appears to be but little doubt of their having arrived at the truth, at least so far as regards the numerous variations: Montagu having fully stated his reasons (in the Linnean Transactions above referred to) for condensing the various synonyma of Latham, above quoted, I must refer the reader to that interesting paper, as, on account of its length, it will exceed the limits of this work. I shall therefore give Temminck's description of the stages of its plumage.

Its length is fifteen inches: its winter dress is as follows: the beak and legs are deep vermilion: the irides deep brown: the head, neck, and tail are pure white, with the exception of a black spot before the eyes, and a large blackish spot on the orifice of the ears: the breast, belly, and vent are white, very slightly tinged with rose-colour: the back, scapulars, and all the wing-coverts are bright ashy-blue: the outer edge of the wing and the quills are pure white; the exterior quill is bordered longitudinally with black; and half of its interior web, as well as its point, is deep black; but, in very old birds, the extreme point of them is white; and when they have not entirely finished moulting there are several indistinct ashy-bands on the head. The young have the head and

the occiput of a clear brown: a large white spot behind the eyes: the under parts and a collar on the nape white, which colour is slightly tinted with rosy on the fore part of the neck, and marked with brown crosses on the sides of the body: the top of the back, the scapulars, and lesser wing-coverts are deep brown edged with yellowish: the upper edge of the wing, the rump, and the greater part of the tail-feathers are white; the latter being terminated by a band of blackish-brown: the quills are white at their origin and on their inner webs; black externally and at their tips: the greater coverts are ashy-blue: the base of the beak is livid, its tip black: the legs are yellowish. At the first autumnal moult the upper part of the back is ashy-blue, varied with several brown feathers; the wing is also of an ashy-blue, but the feathers are spotted with brown and bordered with yellowish: the forehead and all the under parts pure white: the head is white spotted with very clear ash: before the eyes there is a brown spot, as well as another behind on the orifice of the ears: the base of the beak is reddish, its point is brown. They retain their plumage during the first winter, and after the next vernal moulting the summer plumage is perfected. At this time all the head and the top of the neck are clothed, as it were, in a hood, of a very deep brown: the eyelids are surrounded with white feathers: the lower part of the neck, and all the plumage of the under parts, are of a beautiful rosy-white (but the rosy tinge disappears towards the autumn): the beak and legs are deep carmine:

in other respects the plumage is the same as in the winter.

The Red-legged Gull inhabits the banks of large rivers or lakes, retiring in the winter to the sea-coasts: it is common in most parts of Europe, and particularly so in Holland, throughout the year. It occurs also in plenty in this country, and breeds in the fens of Lincolnshire and other parts: it makes a nest on the ground with rushes, dead grass, and such like materials, and lays three eggs of an olivaceous-brown, marked with rusty-brown blotches. As soon as the young are able to accompany their parents, they all retire from the interior to the coasts.

MASKED GULL.

(Larus capistratus.)

La. *albus, capite brunneo, remigibus exterioribus rachidibus albis, rostro pedibusque brunneo-rufis.*

White Gull with the head brown, the shafts of the outer quills white, the beak and legs brown-red.

Larus capistratus. Mouette à masque brun. *Temm. man. d'Orn. 2 Edit.* ii. 785.

Masked Gull. *Lath. Gen. Hist.* x. 139.

Very similar to the foregoing bird: its length is thirteen inches: beak smaller and more slender than in the former: the outer quills with white shafts: the entire front of the head light brown, appearing as a

mask: the legs reddish-brown. In the summer the mask is dirty grey-brown: the top of the head, cheeks, opening of the ears, and throat light brown: nape and fore part of the neck white, and the brown on the throat much deeper than on the head: legs reddish.

A new species published by M. Temminck; according to whom it is found on some of the British coasts, common in the Orcades, and in Scotland: also in various parts of the Arctic Circle, and Baffin's Bay and Davis's Straits. The eggs are said to be ashy-green, with deeper spots.

LAUGHING GULL.

(Larus atricilla.)

La. *albus, capite nigricante, rostro rubro, pedibus nigris.*
White Gull with the head dusky, the beak red, and the legs black.
Larus atricilla. *Linn. Syst. Nat.* 1. 225. *Gmel. Syst. Nat.* 1. 600. *Lath. Ind. Orn.* 2. 813.
Gavia ridibunda. *Briss. Orn.* 6. 192. *pl.* 18. *f.* 1.
Mouette à capuchon plombe. *Temm. man. d'Orn.* 2 *Edit.* ii. 779.
Laughing Gull. *Catesby, Carol.* 1. *pl.* 89. *Penn. Arct. Zool.* 2. 454. *Lath. Gen. Syn.* 6. 383. *Mont. Orn. Dict.* 1? *Wils. Amer. Orn. v.* ix. *pl.* lxxiv. *f.* 4. *Lath. Gen. Hist.* x. 137.

This bird greatly resembles the preceding, but it is distinguished by its larger size: the head and the upper part of the neck are bluish-black: between the shoulders is very deep bluish: the quills are longer

than in that species, and are uniform black, with their base bluish: the legs are of a black-purple.

A native of America, and also of the eastern parts of the vast Russian empire, and of the Austral islands; and, according to Montagu, of this country also; he having observed several of them feeding in a pool near Winchester, one of which he shot; and likewise two others near Hastings, in Sussex. Its voice resembles a coarse laugh. Is supposed to breed at Hudson's Bay; at least a bird similar to it is said to make its nest in the pine trees! and lays four? lead-coloured eggs.

Wilson, or at least Ord, the continuator of his admirable work, says, that this species builds in the marshes, and lays three clay-coloured eggs, which are marked with irregular spots of purple and clear brown.

LITTLE GULL.

(Larus minutus.)

La. *albus, capite nigro, alis cinereis, remigibus apice albis, pedibus coccineis.*

White Gull with the head black, the wings ash-colour, the tips of the quills white, and the legs scarlet.

Larus minutus. *Gmel. Syst. Nat.* 1. 595. *Lath. Ind. Orn.* 2. 813. *Frank. Journ. App. p.* 696.

Mouette pygmée. *Temm. man. d'Orn.* 2 *Edit.* ii. 787.

Larus atricilloides. *Gmel. Syst. Nat.* 1. 601. *Lath. Ind. Orn.* 11. 813.

Little Gull. *Lath. Gen. Syn.* 6. 391. *Mont. Orn. Dict. App. Lath. Gen. Hist.* x. 140.

The winter plumage of this pretty little Gull is not known: it is in length about ten inches, and in its young state has the beak of a blackish-brown: the irides of a deep grey: the forehead, space round the eyes, all the under parts, and upwards of half the tail white: the top of the head and the occiput are blackish-ash: the nape and the back are blackish-grey: the lesser wing-coverts are whitish, spotted with grey and blackish: the middle-coverts are blackish-grey, edged with clear brown: the greater coverts are whitish externally and at their tips: the four first quills are black on their outer webs and at their tip, but white on their inner webs; the three following are ash-coloured outwardly, with their tips white: the tail is terminated by a broad black band, which is narrowest on the outward feathers: the legs are livid flesh-colour.

In its adult summer plumage all the head, and the fore part of the neck, are clothed in a black hood: the lower part of the neck, all the under parts of the body, the rump, and the tail are pure white: the back, scapulars, and wings are bright clear ashy-blue: the two first quills are blackish, tipped with white; the three following are ash-colour: the beak is deep bright red: the irides are deep brown: the legs are of a reddish-crimson.

This bird inhabits the rivers and lakes of the eastern countries of Europe, and the west of Asia: it is abundant in Russia and in the neighbourhood of the Caspian Sea. It rarely visits this part of the globe; but one specimen has been shot on the Thames near Chelsea, and is accurately described

by Montagu, in the Appendix to his Ornithological Dictionary: and another was killed near Brent, in Devonshire, and presented to the British Museum by C. Prideaux, Esq., an industrious and persevering naturalist.

PACIFIC GULL.

(Larus pacifica.)

La. *fuscus pectore uropygioque albidis, rostro fulvo, prope apicem nigro.*

Brown Gull with the breast and rump whitish, the beak fulvous, black near the tip.

Larus pacificus. *Lath. Ind. Orn. Sup.* lxviii.

Pacific Gull. *Lath. Gen. Syn. Sup.* ii. 332. *Lath. Gen. Hist.* x. 169.

"The general colour of the plumage in this bird is deep brown; but the under parts, the rump, and tips of the lesser wing-coverts are very pale brown, approaching to white: tail rather short, rounded at the end: beak dirty orange, swelling near the point, where it is crossed with dusky or black: legs dusky. Inhabits New South Wales."—*Latham.*

PULO-CONDOR GULL.

(Larus Pulo-Condor.)

La. *cinereo-fuscus subtus albus, occipite nigro, fronte cinerea, pedibus flavis.*

Ash-brown Gull beneath white, with the occiput black, the forehead ash-colour, the legs yellow.

Larus Pulo-Condor. *Lath. Ind. Orn. Sup.* lxviii

Pulo-Condor Gull. *Lath. Gen. Syn. Sup.* ii. 332. *Lath. Gen. Hist.* x. 160.

"The forehead in this bird is ash-colour: crown the same, with a mixture of white: the plumage on the upper parts rusty ash-colour and brown mixed; beneath white: beak, hind-head, nape, shoulders, and claws black: legs yellow. Inhabits Pulo Condor."—*Latham.*

STERCORARIUS. JAGER.

Generic Character.

Rostrum mediocre, validum, cylindricum, compressum, curvatum; mandibulâ superiore basi cerâ tectâ, apice aduncâ; inferiore subtus angulatâ, apice rotundatâ.

Nares in cerâ, et versus apicem rostri sitæ.

Cauda, rectricibus duabus intermediis elongatis.

Pedes graciles; *tibiæ* plumis tectæ.

Beak moderate, strong, cylindric, compressed, curved; the upper mandible furnished with a cere at the base, its tip bent down; the lower angulated beneath, with its tip rounded.

Nostrils placed in the cere, and towards the tip of the beak.

Tail, with its two middle feathers elongated.

Legs slender; *tibiæ* clothed with feathers.

STERCORARIUS. Briss.
LARUS. Linn., Gmel., Lath.
CATHARACTA. Ray, Brun.
LESTRIS. Illig., Temm.
PRÆDATRIX. Vieil.

UNLIKE the Gulls, the Jagers and Skuas are courageous and intrepid birds, and wage eternal warfare with them: they rarely trouble themselves to



ARCTIC JAGER.

fish on their own account, but compel the former to disgorge their food, which they instantly seize and devour: however, they sometimes feed upon the dead carcases of whales and (the Jagers especially) upon mollusca. They reside in high latitudes: their flight is very peculiar, and apparently convulsive. The sexes resemble each other, but the young differ much from the old.

The Jagers are of a dingy appearance; the colours being a mixture of brown, whitish, and dull red.

ARCTIC JAGER.

(Stercorarius Cepphus.)

St. *suprà niger, collo pectore abdomineque albis;* vel, *luteo fuscoque varius, subtus pallidior, maculâ alarum albâ;* jun.

Jager above black, with the neck, breast, and abdomen white; *or*, varied with yellow and brown, paler beneath, with a white spot on the wing; *young*.

Larus parasiticus. *Linn. Syst. Nat.* 1. 226. *Gmel. Syst. Nat.* 1. 601. *Lath. Ind. Orn.* 2. 819.

Stercorarius longicaudus. *Briss. Orn.* 6. 155.

Catharacta parasitica. *Brun. Amer. Bor.* 127, 128.

Le Labbe à longue queue. *Buff. Hist. Nat. Ois.* 8. 445. *Buff. Pl. Enl.* 762.

Strundt-jager. *Raii Syn.* 127.

Arctic Bird. *Edw. Glean. p.* 148, 149.

Arctic Gull. *Penn. Brit. Zool.* 2. 245. *pl.* 87. *Penn. Arct. Zool.* 2. 459. *Lath. Gen. Syn.* 6. 389. *pl.* 99. *Lew. Brit. Birds*, 6. *pl.* 207. *Walc. Syn.* 1 *pl.* 116. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds*, 2. 239. *Linn. Trans.* viii. 267. *Lath. Gen. Hist.* x. 164.

Stercoraire parasite. *Temm. man. d'Orn.* 512. *Id.* 2 *Edit.* ii. 796.

Young.—Larus crepidatus. *Gmel. Syst. Nat.* 1. 602. *Lath. Ind. Orn.* 2. 819.

Catharacta Cepphus. *Raii Syn.* 129. *Brun. Orn. Bor.* 126.

Stercorarius. *Briss. Orn.* 6. 150.

Le Labbe, ou le Stercoraire. *Buff. Hist. Nat. Ois.* 8. 441. *pl.* 34. *Buff. Pl. Enl.* 991. *Temm. man. d'Orn.* 515.

Le Labbe à courte queue. *Cuv. Reg. Anim.* 1. 520.

Black-toed Gull. *Penn. Brit. Zool.* 2. 244. *pl.* 86. *Penn. Arct. Zool.* 2. 460. *Lath. Gen. Syn.* 6. 387. *Lath. Syn. Sup.* 268. *Lew. Brit. Birds,* 6. *pl.* 216. *Walc. Syn.* 1. *pl.* 118. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 236. *Lath. Gen. Hist.* x. 166.

Length, including the long tail-feathers, about twenty-one inches: beak of a clear olive, with its tip black: irides yellowish-brown: the top of the head, the back, wings, and tail, are very deep unspotted brown: the forehead, nape, sides of the head, throat, and fore part of the neck are yellowish-white: breast and belly pure white: vent and tail-coverts rayed with brown and yellowish: quills white on their inner webs at the base: their shafts white: the two middle tail-feathers are considerably longer than the others: legs black. The young have the brown on the head and the back brighter; the forehead brown, with all the feathers of these parts tipped with reddish-white: the fore part of the neck, the nape, and under parts are of a greyish-white: the sides, thighs, vent, and tail-coverts are striped with blackish, brown, and whitish: the two middle tail-feathers scarcely exceed the others in length.

This species is abundant in the Arctic regions; and also in the Hebridal islands and the Orcades, and

other northern countries: it is very scarce towards the south of Britain, never having been observed farther in that direction than the coasts of Yorkshire, excepting the young, which has been taken near Horsham in Sussex, near Oxford, and on the coast of Lancashire. It breeds in the northern regions, and in the Hebrides: its nest is composed of dry grass: the eggs are two in number, very light brown, marked with irregular dark brown blotches.

CATARRACTES. SKUA.

Generic Character.

Rostrum mediocre, validum, cylindricum, compressum, curvatum; mandibulâ superiore basi cerâ tectâ, apice aduncâ; inferiore subtus angulatâ.

Nares in cerâ, et versus apicem rostri sitæ.

Cauda pennis intermediis haud elongatis.

Pedes graciles; *tibiæ* parte inferiore nudæ.

Beak moderate, strong, cylindric, compressed, curved; the upper mandible furnished with a cere at its base, its tip hooked; the under angulated beneath.

Nostrils placed in the cere, towards the tip of the beak.

Tail with its middle feathers not elongated.

Legs slender; the lower part of the *tibiæ* naked.

CATARRACTES. Ray.
CATHARACTA. Brun.
LARUS. Linn., Gmel., Lath., Briss.
LESTRIS. Illig., Temm.

THESE birds differ from the Jagers in having the tail-feathers nearly even, the beak stouter, and the tibiæ divested of feathers, longer and more slender, as are also the legs. In manners and disposition they assimilate, but the Skuas are more partial to fish and

cetaceous animals than the Jagers, thus paving the way towards the Petrels.

These are also natives of the Arctic regions, and their plumage is of a dingy hue.

COMMON SKUA.

(Cataractes Skua.)

Ca. *tarsi posticè subrugosi.*
Skua with the tarsi slightly rugose behind.
Larus Catarractes. *Linn. Syst. Nat.* 1. 226. *Gmel. Syst. Nat.* 1. 603. *Lath. Ind. Orn.* 2. 818.
Catharactes Skua. *Brun. Orn. Boreal.* 125.
Catarractes et Catarractus. *Raii Syn.* 128. *A.*
Larus fuscus. *Briss.* 6. 165.
Le Goëland brun. *Buff. Hist. Nat. Ois.* 8. 408.
Stercoraire cataracte. *Temm. man. d'Orn.* 511.
Lestris cataractes. *Temm. man. d'Orn.* 2 *Edit.* ii. 794.
Skua Gull. *Penn. Brit. Zool.* 2. 243. *Penn. Arct. Zool.* 2. 531. *A. Lath. Gen. Syn.* 6. 385. *Lew. Brit. Birds*, 6. *pl.* 211. *Walc. Syn.* 1. *pl.* 117. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds*, 2. 233. *Lath. Gen. Hist.* x. 161.

Length about twenty-one inches: the head and space round the eyes are deep brown: the neck, as well as all the under parts, are reddish-grey shaded with clear brown: the back and scapulars are dull red, laterally bordered with deep brown: the wing-coverts, secondaries, and tail-feathers brown, the quills white for half their length; the rest deep brown: the shafts of the quills and tail-feathers white: the

legs, claws, and beak deep black, the last brown at its base : the irides brown.

Found in the northern regions ; very abundant in the Hebrides, Orcades, in Norway, and in Lapland ; but rarely seen southwards, except in very severe tempestuous winters, when it has occurred on the coasts of Holland and England. It breeds in large flocks on the summits of mountains, amongst the grass and heath, laying three or four eggs, olivaceous, sprinkled with large brown spots. It is a bold rapacious bird, and during the period of incubation, it defends its nest most strenuously, attacking both man and beast that offers to go near them, and that so violently that the shepherds are obliged to protect themselves with a stick ; and the persons who employ themselves in procuring their eggs are said to hold a knife or other sharp instrument over their heads, upon which the enraged bird precipitates and transfixes himself. They feed upon fishes and the flesh of cetacea ; but, unlike the Gulls, they tear their prey in pieces.

POMARINE SKUA.

(Cataractes Pomarina.)

Ca. *tarsi posticè rugosi.*
Skua with the tarsi rugose behind.
Stercoraire pomarin.—Lestris pomarinus. *Temm. man. d'Orn.* 514. *Id.* 2 *Edit.* ii. 793.
Stercorarius striatus. *Briss. Orn.* 6. 152. *pl.* 13. *f.* 2.
Pomarine Gull. *Lath. Gen. Hist.* x. 163.



Griffith

POMARINE SKUA.

This species is described by Temminck, who says that it is about nineteen inches in length: all the upper parts are brown-bay, without spots: the under parts are also brown, but paler and without spots: the inner base of the quills, and the upper part only of the tail-feathers, are pure white, the rest is blackish-brown; the shafts of the quills are white: the beak is bluish: the irides are bright yellow: the tarsi are leaden-blue: the base of the toes and the membrane are whitish; the rest is black: the hinder claw is pure white. The young have the head and neck dull brown, with the ends of the feathers bordered with lighter brown: before the eyes is a black space: the back, scapulars, and wing-coverts are deep brown; each feather tipped with a lunule of bright red: the breast, belly, and sides are ashy-brown, marked on the middle of the feathers with spots and zigzags of red: the rump, vent, and tail-coverts are rayed with broad bands of blackish and red: the base of the beak is greenish, the tip black.

Inhabits the regions of the Arctic Circle; and sometimes appears on the sea-coasts of Holland and France: rarely in the interior of the country, and then only during violent storms of wind.

PROCELLARIA. PETREL.

Generic Character.

Rostrum capite brevior, apice valdè compressum, integrum; mandibulæ apice aduncæ.	*Beak* shorter than the head, its tip greatly compressed, entire; both mandibles hooked.
Nares tubulo suprà basin rostri decumbente, truncato-geminata.	*Nostrils* placed in a truncated and geminated tube above the base of the beak.
Pedes graciles; *tarsi* elongati; *unguis* posticus loco pollice.	*Legs* slender; *tarsi* elongated; no hinder toe, but a simple *claw* instead.

PROCELLARIA Auctorum.

THE Petrels are the smallest birds of this group; they fly about in the twilight, and delight in stormy and cloudy weather; their flight is astonishingly rapid, and their movement so abrupt, that it is difficult to watch them for a long period: during fine weather they seldom appear abroad, but take refuge in the deserted hole of a rabbit, or in the cleft of a rock, making their appearance towards evening, in search of food, which consists of various insects and vermes, and also pieces of blubber and fat, that float about on the surface of the water.



Griffith

LEACH'S PETREL.

LEACH'S PETREL.

(Procellaria Leachii.)

Pr. *caudâ subfurcatâ.*
Petrel with the tail slightly forked.
Petrel de Leach.—Procellaria Leachii. *Temm. man. d'Orn.* 2 *Edit.* ii. 812.
Leach's Petrel. *Lath. Gen. Hist.* x. 194.

Length seven inches and a half: beak and legs black: head and body dull black: sides of the belly and upper tail-coverts white, with the shafts of the feathers brown; wing-coverts dusky brown: quills and tail black, the last somewhat forked.

The first specimen known of this bird was in the splendid collection of Mr. Bullock, who killed it in the island of St. Kilda, one of the Hebrides. At the period of the dispersion of his cabinet, my friend, Dr. Leach, observed, that the bird was distinct from the Stormy Petrel, and purchased it for the British Museum, as an addition to the indigenous collection of animals, &c. preserved there. Temminck has, in consequence, named it after him, as a mark of honour due to so keen a zoologist. A second specimen has been killed on the coast of Picardy in France. In November, 1823, a specimen was brought to the London market alive: and in the succeeding month one was killed in Devonshire, and another in Hertfordshire.

It is said not to be uncommon in the isle of St. Kilda; that it lays a single white egg, in a hole of a

rock, or other cavity; and, like its congeners, that it rarely appears till dusk, when it is in quest of food, which consists of small insects.

STORMY PETREL.

(Procellaria pelagica.)

Pr. *caudâ æquale, tarsi mediocres.*
Petrel with an equal tail and moderate tarsi.
Procellaria pelagica. *Linn. Syst. Nat.* 1. 212. *Gmel. Syst. Nat.* 1. 561. *Briss. Orn.* 6. 140. *pl.* 13. *f.* 1. *Lath. Ind. Orn.* 2. 826.
Oiseau de tempête. *Buff. Hist. Nat. Ois.* 9. 327. *Cuv. Reg. Anim.* 1. 516.
Pétrel pigmé. *Temm. man. d'Orn.* 519.
Stormfinch. *Will. Orn.* 395.
Stormy Petrel. *Penn. Brit. Zool.* 2. 259. *pl.* 91. *Penn. Arct. Zool.* 2. 464. *Edw. Glean. pl.* 90. *Alb. Birds,* 3. *pl.* 92. *Lath. Syn. Sup.* 269. *Lew. Brit. Birds,* 6. *pl.* 219. *Walc. Syn.* 1. *pl.* 91. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. *pl.* 249. *Lath. Gen. Hist.* x. 189.

This species is about the size of a Swallow, and in its general appearance and flight not unlike that bird: its length is about six inches: its beak is black: its irides brown: the head, back, wings, and tail are deep black; its under parts are dusky soot-colour: its rump and neck are white: and its scapulars and secondary quills are tipped with white: the wings, when closed, are of an equal length with the tail, or reach but little beyond: the legs are black, and the tarsi are scarcely one inch in length. The young are more of a dusky hue.

This species inhabits the temperate northern regions of the old world, and prefers the open seas to the land; which it only visits during the period of incubation, and during its migrations. They fly in small flocks, even in the midst of the Atlantic. They are called *Mother Cary's Chickens* by mariners, and their appearance is much dreaded by them, as they are supposed to be the harbingers of an approaching storm. They are fond of sheltering themselves in the wake of a ship, probably for the sake of the various articles of food that are occasionally thrown overboard: but even in the most tempestuous weather they often amuse themselves by skimming along with the most incredible velocity among the hollows of the waves, and sometimes over their summits.

In the breeding season they betake themselves to the fissures of the rocks and rear their young, which they conduct to the watery element as soon as hatched: they lay one large egg, of a white colour, with an obscure band of purplish-brown, formed by minute specks at the larger end.

They are remarkably fat and oily, and the inhabitants of the Feroe Islands are said to draw a wick through the body of the bird, which, being lighted at one end, serves for a candle, the fat and oil of the body feeding the flames!

Although these birds are generally seen at sea, several instances have occurred of their being found inland; specimens having at different times been killed at Oxford, Bath, near London, and in Derbyshire: and Montagu says that they are frequently picked up dead on the British coasts. During the

stormy weather in November and December last (1824) many specimens were killed in the inland counties of England; one is in the possession of J. E. Bicheno, Esq., killed at Newbury, and another was shot between Blackfriars and Westminster Bridges.

Temminck asserts that they are only known to breed within the Arctic Circle; but their eggs have been taken from under the parent bird in Cornwall, and in the Islets of Zetland, as noticed by Montagu; thus proving them to be truly indigenous to Britain. Again, Mr. Scarth, as related in the Linnean Transactions, while on a small uninhabited island in Orkney, in passing over a tract of peat moss in the month of August, where he was induced to go, by hearing a whirring sound somewhat resembling that of a spinning-wheel, found a nest in a small hole in the ground, of very simple construction, being little more than a few fragments of shells laid on the bare turf; the eggs two in number, round and white, and large in proportion: on its first seizure the bird squirted out of her mouth an oily substance, of a very rancid smell. During four days' confinement in a cage she would eat nothing; but having observed that she drew the feathers of the breast through the beak frequently, Mr. S. was induced to smear the breast with oil; he afterwards placed a saucer of oil in the cage, and he found that she regularly extracted the oil by dipping her breast in the vessel, and then sucking the feathers as before. In this way he kept the bird for three months. She sometimes made the same purring noise which first attracted notice, and sometimes whistled very shrilly.

They chiefly live upon small fish; and, though silent by day, are very noisy and clamorous during the night.

LONG-LEGGED PETREL.

(Procellaria oceanica.)

Pr. *caudâ æquale, tarsi elongati.*
Petrel with an equal tail and elongated tarsi.
Procellaria oceanica. *Forster?—Bonaparte, Philad. Journ. v.* iii. 8.
Pétrel échasses. *Temm. man. d'Orn.* 520. *note.*
L'Oiseau de tempête. *Buff. Hist. Nat. Ois.* 9. *pl.* 23. *Buff. Pl. Enl.* 993.
Stormy Petrel. *Lath. Gen. Syn.* 6. 411. 18.
Long-legged Petrel. *Lath. Gen. Hist.* x. 193.

Temminck was the first to discriminate this species from the Common Petrel; and he refers to the synonyms as given above for correct figures and a description. It chiefly differs in having the tarsi of greater length than that bird; and is thus commemorated by Latham (according to Temminck): "Size of a Swallow: length six inches: breadth thirteen inches: beak black: the general colour of the plumage is black, but paler on the under parts, where it inclines to soot-colour: the ends of the second quills, rump, and vent white; and the four outer tail-feathers are white on the inner webs at the base: the wings, when closed, are above an inch longer than the tail: the

legs are long and black :"—the tarsi one inch and a third long.

Inhabits the Southern and Pacific Oceans.

WILSON'S PETREL.

(Procellaria Wilsoni.)

Pr. *caudâ subæquale, tarsi elongati, membranâ maculâ flavâ.*
Petrel with a nearly equal tail, elongated tarsi, and a yellow spot on the webs.
Procellaria Wilsoni. *Bonaparte, Philad. Journ. v.* iii. *no.* 8. *Vigors, Zool. Jour.* i. 425.
Procellaria pelagica. *Wils. Amer. Orn. v.* vii. *p.* 90. *pl.* lx. *f.* 6.
Stormy Petrel. *Catesby Carol. App.* 1. 14.

The general colour of this bird is deep sooty black : vent, each side, and upper tail-coverts totally white : primaries and tail deep black : greater wing-coverts and some of the secondaries tipped with whitish : beak five-eighths of an inch long, black : feet black, with a large oblong yellow spot on the membranes : length about seven inches.

This bird is confined to the western shores of the Atlantic : it breeds, according to Wilson, in great numbers on the Bahamas and Bermuda Islands, and in some places on the coast of East Florida and Cuba : their nests are usually placed in holes and cavities of the rocks.

PUFFINUS. SHEARWATER.

Generic Character.

Rostrum capite longiùs, gracile, ad apicem compressum, integrum; mandibulæ apice aduncæ.	*Beak* longer than the head, slender, compressed at the tip, intire; both mandibles hooked at the tip.
Nares tubula supra basin rostri decumbente, truncato-geminatæ.	*Nostrils* placed in a double truncated tube situated at the base of the beak.
Pedes mediocres; *unguis* posticus loco pollice.	*Legs* moderate; a *claw* alone in place of the hinder *toe*.

PUFFINUS. Ray, Briss.
PROCELLARIA. Linn., Gmel., Lath. Temm.

SHEARWATERS resemble the birds of the preceding genus in their manners; and, like them, they feed of an evening, and lie close in their holes during the day. They are greatly distributed over the globe.

MANKS' SHEARWATER.

(Puffinus Anglorum.)

Pu. *corpore suprà nigro, subtus albo, pedibus rufis.*
Shearwater with the body above black, beneath white, the legs red.
Puffinus Anglorum. *Raii Syn.* 134. *A.*
Procellaria Puffinus. *Briss. Orn.* 6. 131. *Brun. Orn. Boreal. no.* 119.
Le Puffin cendré. *Cuv. Reg. Anim.* 1. 516.
Manks' Puffin. *Edw. Glean. pl.* 379.
Shearwater Petrel. *Penn. Brit. Zool.* 2. 258. *Penn. Arct. Zool.* 2. 462. *Lew. Brit. Birds,* 6. *pl.* 218. *Walc. Syn.* 1. *pl.* 90. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. 246. *Lath. Gen Hist.* x. 181.

Length fifteen inches: the beak is dusky-brown: the top of the head, the nape, and the upper parts of the body, the wings, tail, the thighs, and the margins of the under tail-coverts, glossy black; the under parts, from chin to vent, white: the legs weak and compressed; brown, with the webs yellowish.

The Shearwater is found in greater and less profusion in most of the northern regions of the globe: it is particularly abundant in the Calf of Man, a small islet near the south of the Isle of Man: and also in the Hebrides. In the former place it appears in February; during the breeding season it takes possession of the rabbit burrows, and lays one white egg, blunt at each end; the young are hatched early in the summer, and are fit to be taken about the beginning of August, when great numbers are killed for



MANK'S SHEARWATER.

food: they are salted and barreled. They depart about September.

During the day they keep in their holes, and towards evening go out fishing and return to their young, which they feed by ejecting the oily contents of their stomach into their mouths while in the nest.

CINEREOUS SHEARWATER.

(Puffinus cinereus.)

Pu. *suprà cinereus subtus albus, caudâ nigricante, rostro flavo, pedibus cinerascentibus.*

Shearwater above ash-colour, beneath white, with the tail dusky, the beak yellow, and the legs greyish.

Pétrel Puffin. *Temm. man d'Orn. 2 Edit.* ii. 805.

Procellaria cinerea. *Gmel. Syst. Nat.* 1. 563. *Lath. Ind. Orn.* 2. 824.

Cinereous Petrel. *Lath. Gen. Syn.* 6. 405. *Lath. Syn. Sup.* ii. 335. *Lath. Gen. Hist.* x. 183.

Young.—Procellaria Puffinus. *Linn. Syst. Nat.* 1. 213. *Gmel. Syst. Nat.* 1. 566. *Lath. Ind. Orn.* ii. 824.

Le Puffin. *Buff. Hist. Nat. Ois.* 9. 321. *Buff. Pl. Enl.* 962.

This is rather a large bird, being upwards of twenty inches in length: its beak is yellowish, with black sutures: irides cinereous: the upper parts of the plumage are chiefly dusky ash-colour: the crown of the head and forehead palest: the under parts from the chin are white: the tail is rounded and black; its under surface pale cinereous: legs bluish: toes

and claws testaceous; webs pale yellow. The young have all the upper part of the plumage much deeper, and where it is bright ash in the old, it is of a slate-colour or deep ash in the young; the under parts of the plumage are varied with ashy waves in some places: the beak is ashy-black, rather slenderer than in the old birds, without an apparent groove, and the two tubes of the nostrils are not united in the same arch.

This bird inhabits many parts of the old world, being found on the shores of the Mediterranean; also on the coasts of Senegal and the Cape of Good Hope, New Holland, and other southern regions.

BRASILIAN SHEARWATER.

(Puffinus Brasilianus.)

Pu. *fusco-nigricans, collo inferiore flavo, rectricibus fusco-nigricantibus.*

Brown-black Shearwater, with the lower part of the neck yellow, the tail-feathers dusky-brown.

Puffinus Brasiliensis. *Briss. Orn.* 6. 138.

Procellaria Brasiliana. *Gmel. Syst. Nat.* 1. 564. *Lath. Ind. Orn.* 2. 821.

Le Puffin du Brasil. *Buff. Hist. Nat. Ois.* 9. 337.

Maiaque. *Raii Syn.* 133.

Brasilian Petrel. *Lath. Gen. Syn.* 6. 398. *Lath. Gen. Hist.* x. 172.

As large as a Goose: the beak is hooked: the entire plumage is dusky and blackish, with the fore

part of the neck varied with yellowish feathers. It is said to inhabit Brazil about the mouths of rivers: it is an active bird, swimming and diving well: its flesh is good.

Rather a doubtful species.

ÆQUINOCTIAL SHEARWATER.

(Puffinus æquinoctialis.)

Pu. *fuscus immaculatus, rostro flavo, pedibus fuscis.*

Brown immaculate Shearwater, with the beak yellow, and legs brown.

Procellaria æquinoctialis. *Linn. Syst. Nat.* 1. 213. *Gmel. Syst. Nat.* 1. 564. *Lath. Ind. Orn.* 2. 821.

Procellaria pacifica. *Lath. Ind. Orn.* 2. 827? *Gmel. Syst. Nat.* 1. 560?

Puffinus Capitis Bonæ Spei. *Briss. Orn.* 6. 137.

Le Petrel-Puffin brun. *Buff. Hist. Nat. Ois.* 9. 326.

Pacific Petrel. *Lath. Gen. Syn.* 6. 416? *Lath. Gen. Hist.* x. 197?

Great Black Petrel. *Edw. Glean. pl.* 89. *Lath. Gen. Syn.* 6. 398. *Lath. Syn. Sup.* ii. 333. *Lath. Gen. Hist.* x. 173.

The Black and Pacific Petrels of Latham appear both to be referable to this species: the former he describes as being the "size of a Raven: length twenty-three inches: the beak is three inches long, and the tubes of the nostrils half an inch; the whole beak is of a yellowish-colour, the sutures of it black; the whole body blackish-brown: legs, toes, and webs brown: claws black." "This varies (he adds) in

having the upper ridge of the beak black, and a large spot of white on the chin." Inhabits the Cape of Good Hope, and New Zealand.

Of the Pacific Petrel he says; "length twenty-two inches: breadth forty inches: the beak is two inches in length, of a lead-colour, and much hooked at the tip: in the place of a tube the nostrils only appear; they are situated obliquely, of an oval shape, a little elevated, and placed an inch and a quarter from the base; the upper parts of the plumage are black, the under dusky: legs pale on the insteps, where they are marked with some black spots, and a few others on the toes and webs." Inhabits Europoa and other islands of the Pacific Ocean. Said to fly in innumerable flocks: disappear at once, dipping under water all together, and then rise as suddenly.

DUSKY SHEARWATER.

(Puffinus obscurus.)

Pu. *nigricans subtus albus, collo lateribus fusco nebuloso, tectricibus alarum medio albido variegatis.*

Dusky Shearwater beneath white, with the sides of the neck clouded with brown, the wing-coverts variegated with white in the middle.

Procellaria obscura. *Gmel. Syst. Nat.* 1. 559. *Lath. Ind. Orn.* 2. 828.

Dusky Petrel. *Penn. Arct. Zool. Sup. p.* 73. *Lath. Gen. Syn.* 6. 416. *Lath. Gen. Hist.* x. 197.

Petrel obscur. *Temm. man. d'Orn.* 2 *Edit.* ii. 808.

Length upwards of a foot: beak black, with its sides horn colour; its point hooked: the upper parts of the plumage are dusky black, the under white: on the sides of the neck varied with brown and white: the legs of the middle wing-coverts are whitish: the legs are externally black, internally pale: the two outward toes are yellowish: the webs are orange-colour; claws black. Inhabits the southern regions of the globe, but appearing occasionally to the north of the equinoctial, having occurred, according to Temminck, in the Mediterranean.

BLACK-TOED SHEARWATER?

(Puffinus? melanopus.)

Pu? *cinereo-nigricans, capistro gulâque griseis maculis minutis nigricantibus, rostro toto digitisque dimidiato nigris.*

Dusky-ash Shearwater? with the capistrum and throat grey, minutely spotted with dusky, the entire beak and half the toes black.

Procellaria melanopus. *Gmel. Syst. Nat.* 1. 562. *Lath. Ind. Orn.* 2. 825.

Black-toed Petrel. *Penn. Arct. Zool. Sup.* 73. *Lath. Gen. Syn.* 6. 408. *Lath. Gen. Hist.* x. 185.

Length thirteen inches: beak black, an inch and a half long: round its base, the chin and throat pale glossy grey, minutely speckled with dusky: the top of the head, and all the upper parts of the plumage,

the wings, and tail, are dusky black; that of the back inclining to hoary: the under parts of the body are hoary cinereous: the legs are very pale; the webs the same for one-third, their tips black: joints of the toes also black.

Said to inhabit North? America.

FULMARUS. FULMAR.

Generic Character.

Rostrum grossum, ad apicem dilatatum, sulcatum; mandibulâ superiore aduncâ; inferiore rectâ subtruncatâ.	*Beak* thick, dilated at the tip, sulcated; the upper mandible hooked; the lower straight and slightly truncated.
Nares tubulatæ.	*Nostrils* tubular.
Pedes mediocres; *unguis* posticus loco pollice.	*Legs* moderate; a *claw* only in place of the hinder toe.

FULMARUS. Leach.
WAGELLUS. Ray.
PROCELLARIA. Linn., Gmel., Lath., Briss.

THE Fulmars differ from their congeners in having the beak stronger, much hooked, suddenly swollen towards the tip, with the lower mandible somewhat truncated at the tip; the nostrils are united in a single groove or furrow on the beak: they are more diurnal than the others, and their nourishment chiefly consists of the flesh of dead cetacea, of mollusca, and vermes.

NORTHERN FULMAR.

(Fulmarus glacialis.)

Fu. *albicans, dorso canescente, rostro pedibusque flavicantibus.*
Whitish Fulmar with the back hoary, the beak and legs yellowish.

Procellaria glacialis. *Linn. Syst. Nat.* 1. 213. *Gmel. Syst. Nat.* 1. 562. *Lath. Ind. Orn.* 2. 823. *Sabine, Linn. Trans.* xii. 523.

Procellaria cinerea. *Briss. Orn.* 6. 143. *pl.* 12. *f.* 2.

Fulmar, ou Petrel-Puffin gris-blanc. *Buff. Hist. Nat. Ois.* 9. 325. *pl.* 22. *Buff. Pl. Enl.* 59. *Temm. man. d'Orn.* 518. *Id.* 2 *Edit.* ii. 802. *Cuv. Reg. Anim.* 1. 515.

Wagellus Cornubiensium. *Raii Syn.* 130. *A.*

Fulmar Petrel. *Penn. Brit. Zool.* 2. 257. *Penn. Arct. Zool.* 2. 461. *Lath. Gen. Syn.* 6. 403. *Lew. Brit. Birds,* 6. *pl.* 217. *Walc. Syn.* 2. *pl.* 89. *Mont. Orn. Dict.* 1. *and Supp. Bew. Brit. Birds,* 2. *pl.* 243. *Lath. Gen. Hist.* x. 179.

Length seventeen inches: beak bright yellow, tinged with orange on its nasal tube: irides yellow: the head, neck, all the under parts of the body, the rump, and the tail, of a pure white: the back, scapulars, wing-coverts, and secondaries, are of a clear blue-ash: the quills are bright grey-brown: the tail is rounded: the legs are greyish-yellow. The young have all the parts of the body of bright grey shaded with brown; the feathers on the back and of the wings tipped with a deeper brown: the quills and tail-feathers are grey-brown: before the eye is an angulated black spot: the beak and legs are ashy-



NORTHERN FULMAR.

yellow. Captain Sabine suspects they are two years attaining maturity.

The Northern Fulmar chiefly affects the ocean, seldom visiting the shores unless for the purpose of breeding, or when compelled to shelter itself from the fury of the wind: it is said to lay one large white egg, the latter end of May, and to breed only in the north polar regions.

It is seldom seen on the British coasts, except on those of the northern part of Scotland, where it is not uncommon during the summer months. It is very numerous in the Isle of St. Kilda, where it remains the whole year (except during the months of September and October), and supplies the inhabitants with a vast quantity of oil, which is used for culinary as well as medical purposes. Pennant says of those of this island, that—"no bird is of such use to the islanders as this; as it supplies them with oil for their lamps, down for their beds, a delicacy for their tables! a balm for their wounds, and a medicine for their distempers."

Its food consists principally of fish, but it will devour indiscriminately any floating putrid substances, such as the filth of ships, which it fearlessly follows. These birds also follow the tracks of the wounded whales, and, when they are exhausted, alight on the carcases by hundreds, and ravenously pluck off and devour lumps of the blubber until they are satiated. This gross food causes them to become excessively fat, and their stomachs are always charged with oil, which they have the power of ejecting with force

from the beak; and when attacked squirt it into the face of their enemy.

ANTARCTIC FULMAR.

(Fulmarus antarcticus.)

Fu. *albus, dorso medio canescente, alis nigricantibus.*
White Fulmar with the back hoary in the middle, the wings dusky.
Procellaria glacialis β. *Lath. Ind. Orn.* 2. 823.
Fulmar Petrel. *Lath. Gen. Syn.* 6. 405. *A.*

Latham says of this bird, "Size of the last (the Northern Fulmar): beak black, stout, and much curved at the end: head, neck, body, and tail white: between the wings pale ash-colour: the whole of the wing dusky black: legs dusky. Inhabits the Antarctic Ocean, pretty far to the south."

This appears to me to have sufficient character of discrimination to constitute a distinct species, exclusive of its locality; and its black beak and deep brown wings well distinguish it from the preceding species.

GIGANTIC FULMAR.

(Fulmarus giganteus.)

Fu. *fusco-nebulosus subtus albidus, remigibus rectricibusque nigricantibus, rostro pedibusque flavis.*

Clouded-brown Fulmar beneath whitish, the quills and tail-feathers dusky, the beak and legs yellow.

Procellaria gigantea. *Gmel. Syst. Nat.* 1. 563. *Lath. Ind. Orn.* 2. 820.

Quebrenta huessos, ou Brisier d'os. *Buff. Hist. Nat. Ois.* 9. 319.

Pètrel géant. *Cuv. Reg. Anim.* 1. 515.

Giant Petrel. *Penn. Arct. Zool. Sup.* 2. 71. *Lath. Gen. Syn.* 6. 396. *pl.* 100. *Lath. Gen. Hist.* x. 170. *pl.* clxxvi.

Length about three feet and a half: the beak is dusky-yellow, and four inches and a half long, very stout, and its upper mandible much hooked at the tip; its tubular process is nearly two-thirds of its length: at the corner of the mouth is a naked yellow skin: the crown of the head is dusky: the hind part of the neck, and upper part of the body are pale fuscous, varied or mottled with dusky white: the scapulars, wing-coverts, quills, and tail are plain dusky brown, the feathers of the latter being darkest in the middle: the sides of the head, the fore part of the neck, the breast, and all the under parts of the plumage are dirty white: the legs are greyish-yellow; the webs and claws dusky.

Frequent in the Southern Seas, where they are often seen by mariners sailing, with their wings expanded, close to the surface of the water, but without

appearing to move them: they are most lively, and play about the surface of the water, or glide along with their extended wings with the greatest activity, previous to, or during, storms: they are stupid birds, and suffer themselves to be knocked on the head with a stick without attempting to stir: their food appears to consist principally of fish, but they will nevertheless feed upon the dead carcases of seals, birds, &c. The sailors call them by the name of Mother Cary's Geese.

DAPTION. PINTADO.

Generic Character.

Rostrum subgracile, capite brevior, ad apicem haud dilatatum; mandibulâ superiore aduncâ, inferiore rectâ, truncatâ.	*Beak* slender, shorter than the head, not dilated at the tip; the upper mandible hooked, the lower straight, truncated.
Nares tubulatæ.	*Nostrils* tubulated.
Pedes mediocres; *unguis* posticus loco pollice.	*Legs* moderate; a *claw* only in place of the hinder *toe*.

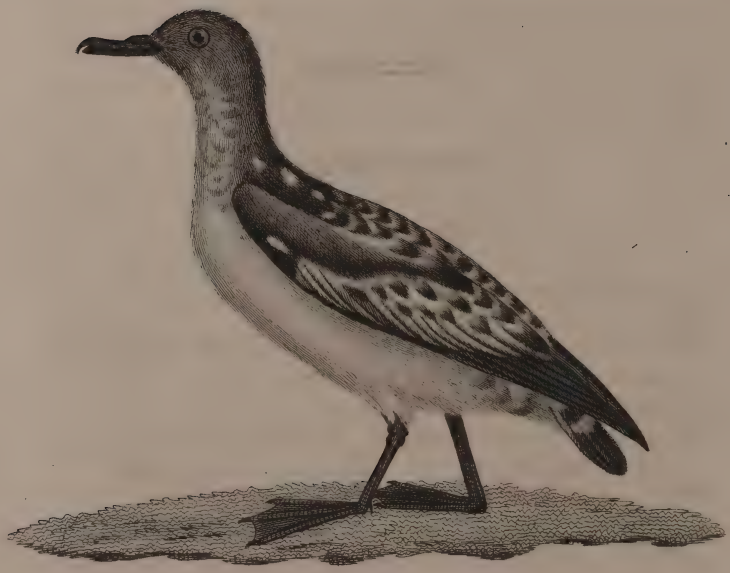
PROCELLARIA. Linn., Gmel., Lath.

THE Pintados appear to form a genus distinct from the rest of the Petrels, inasmuch as the beak is more slender and rather shorter than the head, than in the Fulmars, and the tip of the under mandible is not bent down as in the true Petrels and in the Shearwaters; again, from the Prions they are distinguished by the beak not being depressed and armed at its edges with slight denticulations, and from the Halodromes by possessing the rudiments of a hinder toe which is furnished with a claw, of which those birds are destitute. They are all apparently natives of the

southern regions, and but little is known of their manners.

It may be observed that I have introduced several new genera into the arrangement of the Natatorial Birds, in spite of the prejudices that are so predominant, both in this country and on the Continent, against the adoption of any that are not to be found in the works of Linné or his immediate followers: but experience having taught me, in a class of animals more immediately under my examination than birds, that the separation, or the promulgation of an unnoticed genus has been the means of bringing many species to light whose manners had been most indiscriminately confounded (as witnessed among the smaller Libellulidæ, *or Dragon-flies*, where the Linnean character of *one* species, yea, and that even in some of the most recent publications on Entomology, is so comprehensive, that it positively embraces no less than *two* genera *, one containing three, and the other ten indigenous species, in its extensive grasp! and the consequence has been, that Latreille and other celebrated Entomologists assert, that the sexes unite *pellmell* together, and that the varieties resulting therefrom are innumerable; whereas the fact is, that these insects are as particular in their amours as any others, and the varieties are equally referable to their proper species, the male, usually, however, differing from the female in colour); I have therefore ventured, from the slight notice of the Daption Capensis, in the

* Lestes, *Leach*, and Agrion, *Fabricius*.



Griffith

CAPE DAPTION.

Règne Animal, to give it as the type of a new genus, and to attach the numerous southern Petrels described by Latham thereto, being unable to obtain any correct information respecting them, from the deplorable state of ornithological collections, or rather the want of any *public one* of reference in this country.

CAPE PINTADO.

(Daption Capenses.)

Da. *albo fuscoque varium.*
Pintado varied with brown and white.
Procellaria Capensis. *Linn. Syst. Nat.* I. 213. *Gmel. Syst. Nat.* 1. 565. *Lath. Ind. Orn.* 2. 822.
Procellaria nævia. *Briss. Orn.* 6. 146.
Le Petrel tacheté, ou le Damier. *Buff. Hist. Nat. Ois.* 9. 304. *pl.* 21. *Buff. Pl. Enl.* 964. *Cuv. Reg. Anim.* 1. 515.
White and black spotted Petrel. *Edw. Glean. pl.* 90.
Pintado Petrel. *Lath. Gen. Syn.* 6. 401. *Lath. Gen. Hist.* x. 178.

This, which forms the type of the genus, is fourteen inches in length: the beak is black, and an inch and a half long: the head, hind part of the neck, the quills, and the tail, are black: the sides of the head are varied with black and white: the under parts of the plumage are whitish, irregularly spotted with black: the legs are black. The disposition of the colours of the plumage varies in some specimens: one is commemorated as having those parts that are

usually white of a fine cream-colour; the tail white, with a black tip, and the base of the quills white.

Common in the Antarctic Seas, and particularly so in the vicinity of the Cape of Good Hope, where they fly in flocks; and appear occasionally in such prodigious numbers, that several hundreds have been captured in one night: they fly very low, almost touching the surface of the ocean. They feed on fish and the dead carcases of whales, and are very voracious: when caught they will squirt out a quantity of oil from the nostrils upon the person holding them.

ANTARCTIC PINTADO.

(Daption Antarcticum.)

Da. *fuscum subtus albo-cærulescente, remigibus secundariis uropygio caudâque albis, rectricibus apice nigris.*

Brown Pintado beneath bluish-white, the secondary quills, rump, and tail white, the tail-feathers black at the tips.

Procellaria Antarctica. *Gmel. Syst. Nat.* 1. 565. *Lath. Ind. Orn.* 2. 822.

Le Petrel Antarctique, ou Damier brun. *Buff. Hist. Nat. Ois.* 9. 311.

Antarctic Petrel. *Lath. Gen. Syn.* 6. 400. *Lath. Gen. Hist.* x. 177.

Length sixteen inches: beak an inch and a half long, brown, with a black tip: the irides brownish-hazel: the prevailing colour of the plumage on the upper parts of the body is deep brown; and of the

under parts bluish-white: the secondaries are white, tipped with dark brown; the quills are dark brown, with some of the webs of those nearest the body white: the rump and tail are white, the latter tipped with black: the legs are dirty lead-colour.

Met with, in small flocks, throughout the greater portion of the navigable part of the southern regions.

SNOWY PINTADO.

(Daption niveum.)

Da. *album rachibus pennarum nigris, rostro pedibusque cæruleis.*
White Pintado with the shafts of the feathers black, the beak and legs blue.
Procellaria nivea. *Gmel. Syst. Nat.* 1. 562. *Lath. Ind. Orn.* 2. 823.
Le Petrel blanc, ou Petrel de neige. *Buff. Hist. Nat. Ois.* 9. 314.
Snowy Petrel. *Lath. Gen. Syn.* 6. 408. *Lath. Gen. Hist.* x. 186.

Length one foot: beak black, inclining to blue at the base, and an inch and a quarter long: the entire plumage is of a pure snowy white, with the shafts of the feathers black: the wings are somewhat longer than the tail: the legs are dark blue, with pale webs: the claws long.

Found in great plenty among the ice of the southern regions, and also in the seas adjacent: also off the Isle of Georgia, and Terra del Fuego.

BROWN-BANDED PINTADO.

(Daption desolatum.)

Da. *cinereo-cærulescente subtus album, rectricibus apice fasciâque alarum expansarum nigricantibus.*

Ashy-blue Petrel beneath white, with the tip of the tail-feathers and band on the expanded wings dusky.

Procellaria desolata. *Gmel. Syst. Nat.* 1. 562. *Lath. Ind. Orn.* 2. 825.

Brown-banded Petrel. *Lath. Gen. Syn.* 9. 409. *Lath. Gen. Hist.* x. 187.

Found in the Isle of Desolation: its length is eleven inches: beak black, with a yellowish tip, its length one inch: the plumage on the upper parts of the body is greenish-ash colour; the crown of the head deepest: the sides of the head, including the region of the eyes, and all the under parts of the plumage, white: the ridge of the wing dirty black: the quills and tail dusky: the latter rounded at the end, and tipped with dark brown: the legs brown: webs yellow, and claws black: when the wings are expanded there appears a dark brown band from tip to tip, quite across the body.

GLACIAL PINTADO.

(Daption gelidum.)

Da. *cinereo-cærulescente, dorso nigricante, gulâ jugulo pectoreque albis, rostro flavo, pedibus cæruleis.*

Ashy-blue Pintado, with the back dusky, the throat, jugulum, and breast white, the beak yellow, the tips blue.

Procellaria gelida. *Gmel. Syst. Nat.* 1. 564. *Lath. Ind. Orn.* 2. 822.

Glacial Petrel. *Lath. Gen. Syn.* 6. 399. *Lath. Gen. Hist.* x. 174.

Inhabits the most southern regions, chiefly in the Antarctic Circle itself: it is in length nineteen inches: its beak is yellow, with its nasal tube, the top of the under mandible, the tip of the lower, and the edges of both, black: the top of the head, including the cheeks, and the hind part of the neck to the shoulders, are pale bluish-ash colour: the rest of the upper parts of the plumage is dusky-black: the chin, fore part of the neck and breast, are white: the rest of the under parts pale cinereous, or ash colour: the legs and webs are blue; the under parts of the last white: the claws black.

DARK-GREY PINTADO.

(Daption griseum.)

Da. *fuliginoso-atrum, tectricibus alarum inferioribus albis, rostro fusco, pedibus anticè cærulescentibus.*
Dark sooty Pintado, with the lower wing-coverts white, the beak brown, the legs in front bluish.
Procellaria grisea. *Gmel. Syst. Nat.* 1. 564. *Lath. Ind. Orn.* 2. 821.
Dark-grey Petrel. *Lath. Gen. Syn.* 6. 399.
Grey Petrel. *Lath. Gen. Hist.* x. 174.

Except in size, this bird greatly resembles the Equinoctial Shearwater: it is scarcely fifteen inches in length: its beak is two inches long, and brown: its entire plumage is sooty-black: with the webs of the under wing-coverts white: the fore part of the legs are greenish-blue. In some specimens the chin and throat are whitish.

Inhabits the Southern Ocean.

WHITE PINTADO.

(Daption album.)

Da. *fusco-nigricante pectore abdomine crissoque albis.*
Dusky-brown Pintado with the breast, abdomen, and vent white.
Procellaria alba. *Gmel. Syst. Nat.* 1. 565. *Lath. Ind. Orn.* 2. 822.

White-breasted Petrel. *Lath. Gen. Syn.* 6. 400.
Norfolk Island Petrel. *Lath. Syn. Sup.* ii. 334.
Fuliginous Petrel. *Lath. Gen. Hist.* x. 174.

Described by Latham from a specimen formerly in the collection of the late Sir Joseph Banks: "Length sixteen inches: beak an inch and a half long, hooked at the tip, and black: the head, neck, and upper parts of the body, dusky-brown, nearly black: on the throat a whitish patch: breast, belly, and vent white: under tail coverts cinereous and white mixed: tail rounded at the end: legs black-brown: the fore part of the toes half-way black; the outside of the exterior toe the same for the whole length: webs black: spurs behind blunt. Inhabits Turtle and Christmas Islands." He adds, in his second Supplement, the following account: "Inhabits Norfolk Island, where it is in great plenty, and burrows in the sand like a rabbit. On Mount Pitt, the highest land in the island, the ground was as full of holes as a rabbit warren, and an immense number of aquatic birds burrowed and built their nests in them. These, during the day, were at sea, but as night approaches, they return in vast flocks. The settlers lighted small fires every night on this mount, about which the birds dropped as fast as the people could pick them up and kill them."

SOOTY PINTADO?

(Daption? fuliginosum.)

Da? *fuliginoso-fuscum, capite collo remigibus rectricibusque nigris, caudâ emarginatâ.*

Sooty-brown Pintado? with the head, neck, quills, and tail-feathers black, the tail emarginated.

Procellaria fuliginosa. *Gmel. Syst. Nat.* 1. 562. *Lath. Ind. Orn.* 2. 825.

Sooty Petrel. *Lath. Gen. Syn.* 6. 409. *Lath. Gen. Hist.* x. 187.

This bird is eleven inches in length: its beak is black: irides pale cinereous: the head and neck are deep sooty-black; and the rest of the body brown-black, with the under parts palest: the rump is brown: the ridge of the wing is mixed with cinereous: the quills and tail are deep black; the latter is slightly forked, and scarcely so long as the wings when closed: the legs are slender, an inch long, and black. Inhabits the neighbourhood of Otaheite.

PACHYPTILA. PRION.

Generic Character.

Rostrum mediocre, latum, rectum, depressum, apice uncinato; mandibulæ apice truncatæ, marginibus subdenticulatis.	*Beak* moderate, broad, straight, depressed, its tip uncinated; both mandibles truncated at the tip, their margins slightly denticulated.
Nares ad basin rostri positæ, tubulosæ, distinctæ.	*Nostrils* distinct, tubulous, placed at the base of the beak.
Pedes breves, tridactyli; *unguis* posticus loco pollice.	*Legs* short, three-toed; a *claw* alone in place of the hinder *toe*.

PACHYPTILA. Illig.
PROCELLARIA. Gmel., Lath.

THE Prions were judiciously separated from the rest of the Petrels by Illiger, in his Prodromus Manualiorum et Avium, &c.; and the most fastidious genus haters are disposed to allow them a name of distinction, notwithstanding the additional burthen to the memory (according to their ideas) in consequence of having a new name added to the catalogue. Now, as some notion may be formed of the length to which

the *decided* Linnean followers of Ornithology are disposed to proceed in their favourite scheme of genus sinking, on the plea of the new names being not only unnecessary, but burthensome to the memory, I shall transcribe the remarks of that celebrated ornithologist, Dr. Latham, in the tenth vol. (p. 395) of his General History of Birds, published in 1824, appended to his Apterous Penguin, and then ask who has continued a new name? and I think the Doctor will prove to have invented one which, according to his views, *must* cause an additional burthen to the memory; as Dr. Shaw has not called his bird the *Apterous Penguin*, but the *Southern Apteryx*, or Apteryx Australis.—Speaking of this bird with reference to Shaw's account, Dr. L. says, "The Doctor (S.), it is true, has made this bird the basis of a new genus, and it *certainly differs* from the general tribe of Penguins; yet it coincides with them in so many, as to render this separation less needful: and the reader cannot fail to observe, that, not only in the present instance, but in several others in the course of this work, the great desire of the author to accommodate many new species to some genus already fixed, so as to give the least violence possible to the general system; being of opinion, that creating a single new genus, when it can possibly be avoided, will serve only unnecessarily to burthen the memory, as well as to disturb the mind."

FORSTER'S PRION.

(Pachyptila Forsteri.)

Pa. *cærulescens subtus alba, remigibus rectricibus apice fasciâque alarum expansarum fusco-nigris.*

Blue Prion beneath white, with the quills, tail-feathers, at the tip, and band on the expanded wings, brown-black.

Procellaria vittata. *Gmel. Syst. Nat.* 1. 560. *Lath. Ind. Orn.* 2. 827.

Le Petrel Bleu. *Buff. Hist. Nat. Ois.* 9. 316.

Vittated Petrel. *Forst. Voyage,* 1. 153.

Blue Petrel. *Cook's Voyage,* 1. *p.* 29.

Broad-billed Petrel. *Lath. Gen. Syn.* 6. 414. *Lath. Gen. Hist.* x. 195.

In length twelve inches: its beak is blue-grey, an inch and a quarter in length, and nearly an inch broad at the base; both mandibles are bent at the point, and have their edges slightly notched: the nostrils are placed in a very short tube: the prevailing colours of the plumage are bluish-ash on the upper parts of the body, with some of the feathers brown in the middle, and white on the sides of the head and under parts: beneath the eye is a dusky-black streak: the quills and the tips of the six middle tail-feathers are deep dusky black: the legs are black. The female has the beak somewhat more slender. Both sexes possess, when the wings are expanded, a dark band from the tip of one wing to that of the other, which crosses the back. And also (according to Forster) an amazing thick plumage, having two

feathers instead of one, proceeding out of every root, and lying within one another, forming a very compact and warm covering.

These birds abound in the southern hemisphere, and, like the rest of the group to which they belong, burrow in the ground and under the roots of trees, or take refuge in the clefts of the rocks: they make a noise like the croaking of frogs. They do not appear on shore in the day-time, but towards the morning they are very active, and commence diving in search of food at an early hour, and remain out at sea nearly the whole day.

BLUE PRION.

(Pachyptila cærulea.)

Pa. *cano-cærulescens corpore subtus rectricibusque apice albis, fasciâ pectoris alarumque expansarum obscuris.*

Hoary-bluish Prion, with the body beneath and tip of the tail-feathers white, a band on the breast and on the wings, when expanded, white.

Procellaria cærulea. *Gmel. Syst. Nat.* 1. 560. *Lath. Ind. Orn.* 2. 827.

Blue Petrel. *Forst. Voy.* 1. *p.* 91. *Lath. Gen. Syn.* 6. 415. *Lath. Gen. Hist.* x. 196.

One foot in length: beak blue, with its tip black, and a yellow stripe in the middle, and about an inch and a quarter long: the upper parts of the plumage are pale blue-grey: the under parts white: under

the eye is a dusky patch; and on the breast a band of the same colour: the greater quills are darker than the others, and have the inner webs of some of them nearly white: the wings have a similar mark, extending across from the tip of one to the tip of the other, as in the last species; and they are, when closed, somewhat longer than the tail, which is nearly the colour of the back, with its outer feathers white, the next white on its inner web, and the next tipped with white: the legs are blue; the webs pale.

Fly in flocks in the Southern Ocean, from 47 to 58 degrees of latitude.

FRIGATE PRION.

(Pachyptila marina.)

Pa. *dorso tectricibus alarum fuscis, vertice cerviceque cærulescente-cinereis, uropygio cærulescente, genis corporeque toto subtus albis.*

Prion with the back and wing-coverts brown, the crown and cervix bluish-ash, the rump bluish, the cheeks and entire body beneath white.

Procellaria marina. *Lath. Ind. Orn.* 2. 826.

Frigate Petrel. *Lath. Gen. Syn.* 6. 410. *Lath. Gen. Hist.* x. 189.

Length eight inches and a half: beak slender, and but little hooked: the tip of the head and hind part of the neck, as far as the shoulders, bluish-ash colour: the back and wing-coverts brown: the rump

hoary blue: the sides of the head, above the eye, and all the under parts, white: beneath the eye a trace of bluish-ash colour: the tail very slightly forked: the legs black, with a yellowish mark in the middle of each web.

Found in the Southern Ocean, in latitude 27 degrees.

AMERICAN PRION.

(Pachyptila Fregatta.)

Pa. *nigra subtus alba, pedibus nigris.*
Black Prion beneath white, with the legs black.
Procellaria Fregatta. *Linn. Syst. Nat.* 1. 252. *Gmel. Syst. Nat.* 1. 561. *Lath. Ind. Orn.* 2. 826.
Hirundo Americana. *Rochef. Antill. pl.* 152.
American Petrel. *Lath. Gen. Hist.* x. 189.

This species is said to be rather less than the Common Petrel, and to be black above and white beneath, with black legs.

It inhabits the ocean.

FORK-TAIL PRION?

(Pachyptila? furcata.)

Pa.? *argenteo-grisea, gulâ pallidâ, crisso albo, remigibus caudâque forficatâ nigricantibus, rectrice extimâ extus albâ.*

Silvery-grey Prion? with the throat pale, the vent white, the quills and forked tail dusky, the exterior tail-feather white on the outside.

Procellaria furcata. *Gmel. Syst. Nat.* 1. 561. *Lath. Ind. Orn.* 2. 825.

Fork-tail Petrel. *Penn. Arct. Zool.* 2. 463. *Lath. Gen. Syn.* 6. 410. *Lath. Gen. Hist.* x. 188.

This is a northern species, and was first met with on the ice between Asia and America. It is in length ten inches: its beak is black and much hooked: the prevailing colour of the plumage is a dark silvery grey, with the under parts palest: the forehead and crown are varied with brown: the quills are dusky-grey; the secondaries are paler grey on their edges: the inner ridge of the wing is dusky black: the chin is pale grey; the vent white: the tail is forked and coloured similarly to the quills, with its outer feathers, on each side, white on its exterior web: the legs are black.

HALODROMA. HALODROME.

Generic Character.

Rostrum mediocre, compressum, rectum, apice adunco; mandibulâ superiore utrinque sulco obsoleto, inferiore compressâ, truncatâ.	*Beak* moderate, compressed, straight, its tip hooked; the upper mandible with an obsolete groove on each side, the lower compressed, truncated.
Nares geminatæ.	*Nostrils* geminated.
Alæ elongatæ.	*Wings* elongated.
Pedes breves, tridactyli; *ungue* pollicis nullo.	*Legs* short, three-toed; no hinder *claw*.

HALODROMA. Illig.
PROCELLARIA. Gmel., Lath.

THIS genus was also detached by Illiger from the Procellariæ, from which it not only differs as above stated, but also in possessing a dilatable pouch, as in the Cormorants, and in wanting the hinder claw entirely, as in the Albatrosses.

Unlike the rest of the birds of this family, the one comprised in this genus is said to dive admirably.

DIVING HALODROME.

(Halodroma urinatrix.)

Ha. *fusco-nigricans subtus alba, gulâ plicatâ nigrâ.*

Dusky-brown Halodrome beneath white, with a dilatable black throat.

Procellaria urinatrix. *Gmel. Syst. Nat.* 1. 560. *Lath. Ind. Orn.* 2. 827.

Diving Petrel. *Lath. Gen. Syn.* 6. 413. *Lath. Gen. Hist.* x. 194.

This singular bird is the size of the Common Sea-Dove: its length is eight inches and a quarter: its beak is stout and black, with the middle of its lower mandible white on the sides; its irides are dusky-blue: the upper parts of the plumage are dark-brown: the chin is black, and the rest of the under parts are white: the wings are rather shorter than the tail: the legs are bluish-green: the webs black.

Inhabits New Zealand in large flocks, sporting and diving on the surface of the water, and frequently to a considerable distance, with great activity. They are said to croak like frogs, or to make a noise like the cackling of a hen.

DIOMEDEA. ALBATROSS.

Generic Character.

Rostrum longissimum, validum, crassum, rectum, lateratim compressum; mandibulâ superiore sulcatâ, apice aduncâ; inferiore apice truncatâ.
Nares tubulatæ.
Pedes tridactyli; *ungue* postico nullo.

Beak very long, strong, thick, straight, laterally compressed; the upper mandible with a groove, its tip hooked; the lower with its tip truncated.
Nostrils tubulated.
Legs three-toed; no hinder *claw*.

DIOMEDEA. Linn., Gmel., Lath.
ALBATRUS. Briss.

THE Albatrosses are the largest of the aquatic birds, and all inhabit the southern regions, living on the smaller fishes, vermes, and mollusca. In the Linnean Transactions, vol. xii. p. 489, Captain Carmichael observes that at least four species breed on the Island of Tristan de Cunha; that all of them nourish their young by disgorging the contents of the stomach: during the time of incubation no alarm is experienced on the approach of any man, as the birds suffer themselves to be kicked or pulled off their



WANDERING ALBATROSS.

nests without the smallest resistance, and soon return again to their post: when irritated the feathers of the cheeks are separated, so as to display a beautiful stripe of naked orange skin, running from the corners of the mouth towards the back of the head.

WANDERING ALBATROSS.

(Diomedea exulans.)

Di. *suprà fusco-rufescens nigricante striata et maculata subtus alba, collo suprà et lateribus fusco transversim striatis, remigibus majoribus nigris, minoribus rectricibusque plumbeo-nigricantibus.*

Albatross above brown-red, striped and spotted with dusky, beneath white, the upper part and sides of the neck transversely striped with brown, the greater quills black, the lesser and tail-feathers dusky-lead colour.

Diomedea exulans. *Linn. Syst. Nat.* 1. 214. *Gmel. Syst. Nat.* 1. 566. *Lath. Ind. Orn.* 2. 789.

Albatrus. *Briss. Orn.* 6. 126. *Buff. Hist. Nat. Ois.* 9. 339. *pl.* 24. *Buff. Pl. Enl.* 237. *Cuv. Reg. Anim.* 1. 517.

Man of War Bird. *Albin. Birds*, 3. *pl.* 81.

Wandering Albatross. *Edw. Glean. pl.* 88. *Penn. Arct. Zool.* 2. 423. *Lath. Gen. Syn.* 5. 304. *Lath. Gen. Hist.* x. 48.

The Wandering Albatross is as large as a Swan: length near four feet: extent about ten feet, or upwards: its beak is dirty yellow: the crown of the head is pale ashy-brown: the prevailing colour of the rest of the body is white, crossed with blackish lines on the back and wings, and with spots towards the rump: the greater quills are black: the tail is dusky-

plumbeous, and rounded: the legs are flesh-colour. The young are described as being brown; and as they advance in age, become more or less mottled with white.

These birds are principally found in the seas adjacent to the Cape of Good Hope, and in those that divide Kamtschatka from the continent of America. They are exceedingly voracious, and feed on various species of fish and mollusca: they are great enemies to the flying-fish, and destroy them when they make their temporary appearance in the air: they likewise devour the salmon, and pursue the shoals of that fish into the mouths of large rivers; and so gorge themselves as to be prevented by their repletion from rising; and are said when they cannot take the whole of a large fish into their stomach at once, to swallow the thick end only, leaving the tail sticking out of their mouths; and in this situation they are taken by the natives, many of whom set a high value upon their feathers, which they use for their arrows. The natives of the South Sea Islands watch the arrival of these birds at the rainy season; and, when they observe them, they launch from their canoes a light float of wood into the water, baited with a small fish. When one of the birds approaches it a man stands ready with a pole, and on its pouncing upon the bait he strikes at it, and seldom fails of bringing it down. If, however, he miss his aim, he must wait for some other birds, for that will no more be tempted to approach.

The inhabitants of Kamtschatka make bouys to their nets of the intestines of these birds, which they

blow up into bladders: they also use the bones of the wings for tobacco-pipes and needle-cases. Their flesh is very hard and dry. Their cry is harsh and disagreeable, not unlike the braying of an Ass.

They are said to breed in the southern regions about September; their nests are formed of earth on the ground, and are from one to three feet in height, and indented at the apex: the egg is larger than that of a Goose, white, marked with dull spots at the larger end, and is thought to be very good food, and possesses the singular property of the white not becoming hard by boiling. When the female is sitting the male supplies her abundantly with food, and during this time she is so tame as to allow herself to be pushed off the nest, while her eggs are taken from her; though when attempted to be seized at other times, both sexes make a vigorous resistance with their beaks, when not suffering from the effects of repletion.

CHOCOLATE ALBATROSS.

(Diomedea spadicea.)

Di. *rostro albido, corpore saturate castaneo-fusco, abdomine pallido, facie alisque subtus albis.*

Albatross with a whitish beak, the body dark chesnut-brown, the abdomen pale, the face and wings beneath white.

Diomedea spadicea. *Gmel. Syst. Nat.* 1. 568. *Lath. Ind. Orn.* 2. 790.

Albatross de la Chine. *Buff. Pl. Enl.* 963.

Chocolate Albatross. *Lath. Gen. Syn.* 5. 308. *Lath. Gen. Hist.* x. 52.

Length about three feet: the beak of a yellowish-white colour: the irides brown: the fore part of the head, round the eyes, the chin, and the throat, white: the general colour of the plumage is a fine deep chocolate colour; the neck and under parts palest: the inner ridge of the wing and under wing-coverts white: the belly is whitish: the tail is short and rounded: the legs bluish-white: their claws white. It varies in having more or less white about the head. Found in the Pacific Ocean.

YELLOW-NOSED ALBATROSS.

(Diomedea chlororhynchos.)

Di. *rostro nigro suprà basique flavo, corpore suprà atro-cæruleo, subtus uropygioque albis.*

Albatross with the beak black, above and its base yellow, the body above dark bluish, beneath and rump white.

Diomedea chlororhynchos. *Gmel. Syst. Nat.* 1. 568. *Lath. Ind. Orn.* 2. 790.

Yellow-nosed Albatross. *Lath. Gen. Syn.* 5. 309. *pl.* 94. *Lath. Gen. Hist.* x. 52. *pl.* clxix.

Described and figured by Latham from a specimen said to be in the British Museum, and which was taken off the Cape of Good Hope. "Length three feet: breadth seven: the beak four inches long, hooked at the end, but not very stout; the colour of it is black, except the upper ridge, which is yellow the whole length quite to the tip, where it is hooked;

the base of the under mandible is also yellow: irides brown: the head is grey; between the beak and eyes is an obscure black spot; just over the eye a dusky one: the hind part of the neck dusky, the lower part white: back, scapulars, and wings, dusky blue-black: rump and under part of the body white: the tail dusky: the legs are pale yellowish-white; the fore part of them, and the webs dusky. This species is met with in the southern hemisphere, from thirty to sixty degrees all round the pole. Fly about five or six feet above the water." This bird, according to Captain Carmichael, builds its solitary nest, in the Island of Tristan de Cunha, in some sheltered corner; selecting in particular the small drains that draw the water off the land into the ravines: the nest is of the height of ten or twelve inches, of a cylindrical form, with a small ditch round the base; and there is only one egg, which is white, and very large.

SOOTY ALBATROSS.

(Diomedea fuliginosa.)

Di. *rostro nigro, corpore fuliginoso-fusco, pone oculos lunulâ albâ.*

Albatross with the beak black, the body sooty-brown, and a white lunule behind the eyes.

Diomedea fuliginosa. *Gmel. Syst. Nat.* 1. 568. *Lath. Ind. Orn.* 2. 791.

Sooty Albatross. *Lath. Gen. Syn.* 5. 309. *Lath. Gen. Hist.* x. 54.

"LENGTH three feet: beak black: irides pale yellow: at each angle of the eye a nictitating membrane: the prevailing colour of the plumage is brown; the head and tail inclining to black or soot-colour: for a small space, above, behind and beneath the eye, the feathers are white; but not on the fore part of it: quills and tail dark-brown, nearly black: the shafts of both white; and the last pointed in shape: the legs pale brownish lead-colour: claws black. This species is found throughout the Southern Ocean, within the Antarctic Circle."—*Latham.* Also breeds in the Island of Tristan de Cunha: is gregarious, many of them building their nests close to each other*: the nest is of mud, raised five or six inches, and slightly depressed at the top: when the young birds are more than half grown, they are covered with a whitish down: they stand on their respective hillocks like statues till approached close, when they make a strange clattering with their beaks, and if touched, squirt a deluge of fœtid oily fluid from their stomachs.

* As many as one hundred have been counted within the compass of half an acre.

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